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A contract systems approach to human systems actualization.

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A CONTRACT SYSTEMS APPROACH TO HUMAN SYSTEMS ACTUALIZATION

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A CONTRACT SYSTEMS APPROACH TO HUMAN SYSTEMS ACTUALIZATION

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A Contract Systems Approach to Human Systems Actualization

(June, 1974)

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This dissertation provides a theoretical and philosophical rationale for a contractual model of human behavior and social organization. The specific theoretical, axiological and epistemological assumptions of the model are articulated. As a part of the theoretical exposition, original theories of axiological specification and human actualization are presented.

The second part of the dissertation is devoted to the application of the contract model. In this section a major organizational case study is presented as an illustrative application of the contract model to the transformation of a 120 year old custodial mental hospital. The final chapter of the dissertation is concerned with future applications such as contractually negotiated ethics, alternate marital contracts, and human systems design.

TABLE OF CONTENTS

Page

LIST OF FIGURES

LIST OF FIGURES

INTRODUCTION

The appearance of a recent edited book, Conscience, Contract and Social Reality (Johnson, Dokecki & Mowrer, 1972), has signaled that the contract model of human behavior and social organization has come into its own as a legitimate frame of reference for the social and behavioral sciences. Its pragmatic utility as a model for viewing social reality and as a methodology for changing reality can be appreciated when one looks at the diverse applications that include: clinical treatment as in contract contingency management (Bandura, 1969; Kanfer & Phillips, 1970; Tooley, 1966; Tooley & Pratt, 1966); self control (Kanfer & Phillips, 1972; Tooley & Pratt, 1966); marriage and family contracts (O'Neill & O'Neill, 1973; Satir, 1970); in education applied to performance contracting (ETS, 1970); and classroom management (Homme, 1969); learning contracts (Carew & Tooley, 1973; Seeman, 1973; Tooley, 1972); and ultimately in the broader domain of human systems design and development (Chickering, 1971; Gioia, 1973; Goodson & Turner, 1972; Pratt & Tooley, 1964, 1966, 1970; Southworth, 1974; Tooley, 1971; Zuelzer & Tooley, 1974).

This burgeoning concern and application of the psychology of contracts has occurred without a comprehensive and explicit statement of the basic theoretical, pholosophical and epistemological assumptions underlying the model, although this author and Steve Pratt began the original formulations of contract psychology over ten years ago when the concept was basically foreign to the social and behavioral sciences.

It is the purpose of this dissertation to explicate the implicit and explicit theoretical and philosophical assumptions which collectively guide the behavior of those who employ a contractual approach to social problems and the analysis of social reality. In addition to this historical-theoretical treatment, an organizational case study describing its application to the transformation of a medically-oriented, custodial state hospital into an educationally-oriented Center for Human Actualization is used to illustrate the utility of the contract-systems model as an organizing principle.

The dissertation is organized into two basic parts: The first seven chapters which provide the theoretical and philosophical rationale of contract systems theory; and the final three chapters which are concerned with the application of the theory.

CHAPTER I

THE CONTRACT AS THE BASIC CONSTRUCT

All models of human behavior and social organization implicitly or explicitly include a model of man--basic assumptions and value judgments regarding the nature of man, the nature of social reality and the relationship between man and his social reality (Tooley, 1974).

> Gaining wider recognition is the realization that conceptualization of an appropriate heuristic model of modern man is not a superfluous theoretical embellishment but rather is an essential precondition to progress, in social psychiatry and social psychology generally, as well as to progress in theory and practice concerning psychosocial disorders. In these social-behavioral sciences every concept and every operation employed, either explicitly or implicitly, posits a model of man which in turn decisively conditions theory and practice. To avoid blind trial-and-error empiricism and distorting reductionism, a philosophically and theoretically <u>based</u> frame-of-reference is called for--for trying-out and evaluating a wide variety of derivative models of <u>intervention</u>. The model of man selected, structures not only the conceptualization of psychological disorders but also both corrective facilities and corrective procedures (Pratt & Tooley, 1964, p. 52).

In this chapter the intention is to articulate those assumptions which collectively constitute a <u>contractual</u> model of man and social reality, which has been evolving for centuries (Maine, 1861), but has only begun in the last ten years to achieve its scientific expression (Pratt & Tooley, 1964; Tooley & Pratt, 1963). In reviewing these developments over the past ten years in a significant edited work, <u>Conscience, Contract and Social Reality</u>, Hobart Mowrer and

his colleagues have commented:

> Steve Pratt and Jay Tooley (1964, 1966) were the first writers[1] in recent years to stress this distinction (contractual vs intrapsychic models).... Thus a whole new rationale for psychopathology of a functional nature is emerging which stresses interpersonal rather than intrapsychic events (both as regards causation and correction); and here contract psychology seems to be replacing the former emphasis upon conscience, guilt, and so on.... In any case, there seems to be a declining interest, both theoretically and practically, in the concept of conscience and a lively and growing concern with the psychology of contracts (Johnson, Dokecki & Mowrer, 1972; Pp. 415-416).

Increasing numbers of social and behavioral scientists are beginning to express their convictions that an empirical model of man based upon contractual assumptions leads to more fruitful (valid, useful) outcomes than earlier, religious models that frequently impinged upon scientific inquiry (Boring, 1929; Kihn, 1962; Tooley, 1969). This emerging heuristic model for modern man encompasses and brings into sharp focus the distinguishing contractual essence of man.

> Contract is at once an ancient phenomenon and a relatively modern one.... All this is to be expected. For to make and break promises is an exquisitely human faculty. Nietzsche, who so strongly influenced Freud, even suggested "to breed an animal that is able to make promises... is the task which Nature set for herself." The result is man. So far as we know, no other animal has this capability (Szasz, 1965, p. 108).

> My first proposition is one which I believe all will accept. It is that as soon as man learned to talk, became able to think about the future and acquired a moral sense, he had all of the equipment essential for making and keeping promises. Each of these faculties, you will perceive, is rather close

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[1] For an intriguing history of the earlier uses of legal, social, and behavioral contracts see Maine's (1861) classic text, Ancient Law.

> to the core of what makes humanity human... (Havighurst, 1961, p. 12).[2]

Thus, man as socius is cast in irreducible form on the stage of life. From the perspective of contract systems theory, the distinguishing essence of human beings and of the human enterprise, of individuals and societies, is the capacity for the development, expression, and exchange of human values.

The fundamental postulate of this system asserts that the essence of man consists of, and is expressed by, his unique capacity to form contractual relationships; this applies to man-in-the-universe, whether taken individually, intrapsychically, interpersonally, in primary or socio-political groupings, internationally, or in outer-space.

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[2]Ten years later, Havighurst (1970) operationalized his philosophical expression in conceptualizing the plight of culturally disadvantaged children in the public school system.

> It may be useful to examine the educational problem of the socially disadvantaged in terms of the implicit contract that a family and a school accept when a child is entrusted by his family to a school. The parents contract to prepare their child for school entrance, both cognitively and affectively. They further contract to keep him in school and to make home conditions appropriate for his success in school. The school contracts to receive the child, teach him as well as it can, taking account of his strengths and weaknesses and the ways in which he can learn most effectively.
>
> Very little of this contract is put into legal codes, but the education of the child is successful only when both parties carry out their obligations fully. Sometimes one or both parties fail to understand the nature of these obligations.

Our contract systems--explicit or implicit, conscious or unconscious, unilateral or consensual, voluntary or coercive--constitute warp and woof of personal and social life. The integrative function for all human relationships at all levels of social organization can be conceptualized as contractual: contracts are the social bindings that hold each human, and the human-made world together. We make contracts with ourselves and others, while others make contracts that affect every aspect of our lives.

At the same time, we are both the creatures and creators of our contractual world.[3] "From birth to death every human being is a Party" (i.e. as a party to the Societal Contract and within the contract spheres of living) "so that neither he nor anything done or suffered can possibly be understood when it is separated from the fact of participation in an extensive body of transactions--to which a given human being may contribute and which he modifies, but only by virtue of being a partaker in them (Dewey, 1948, p. 198)." We <u>are</u> our contract systems operationally defined by the number, types and patterns of our contracts.

The career of humans, the career of societies, through the ages and today, can best be apprehended in terms of the nature and dialectics of the <u>Societal Contracts</u> characterizing each transitional society.[4]

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[3]As Churchill once said: "Men shape buildings, but buildings shape men."

[4]I use the concept of the "<u>Societal Contract</u>" to label the political-economic socio-cultural configuration of any nation, country or society, present or past. My use of the term obviously does not commit us to any of the particular theories of "Social Contract" adduced in the past whether theories about the ostensible "original" Social Contract, or about the "ideal" Social Contract, as proposed by Locke, Hobbes, Hume, or Rousseau. Critical analyses of all of these theories of "Social Contract" are of course readily available (Mills, 1960).

In summarizing the significance of the concept of contract throughout the history of man the economist, von Mises (1949), concludes that, "Human civilization as it has been known to historical experience is preponderantly a product of contractual relations (p. 198)." For Hayakawa (1967), the general semanticist, contractual agreements comprise the sine qua non of society, "What we call society is a vast network of mutual agreements.... Without such agreements there would be no such thing as society (p. 213)."

The Societal Contract that defines each society can be represented by the contract spheres of human endeavor. These contract spheres have been approached by those arbitrary conveniences called the social sciences and can be selectively seen as the political sphere, economic sphere, etc.; or as contract spheres studied by political science, sociology, economics, psychology, law, education, etc. (Koch, 1963; Lynd, 1939; Mills, 1959).

From the contractual perspective, man is in society and society in man (Frank, 1951; Popper, 1945). The concept of psychosocial contract systems makes it possible to fill in the long-lost "missing link" between the personality level (intrapsychic or personalistic) and the social (or societal) level. The career of each man in his own time, through the social stages and crises of his unique life (Allport, 1962; Allport, 1955; Erikson, 1959; Parad, 1965), can best be appreciated in terms of the interpersonal, ideological,

and situational contracts to which he commits himself and to which he is committed. Kinds of contracts are as diversified as the ever-changing, emerging, kinds of contract spheres, major and minor, that constitute the total human enterprise. Consider the range of reciprocal role and status defining contracts such as the marital contract, the parent-child contract, the employer-employee contract, the teacher-student contract, the citizen-politician contract, ad infinitum. All social relationships represent contractual transactions in the major contract spheres of living--political, economic, professional or vocational, avocational, primary or secondary group, marital, parental, or whatever.

I use the concept of contract here not only in its legal, but in a broad social sense, in the etymologically most generic, denotative and connotative usage (Mandler & Kesson, 1959; Nash, 1964). Contracts represent reciprocal arrangements, agreements, promises, understandings, expectancies, commitments, compacts, covenants; they are ends-means instrumentalities for the exchange of human values and materials as well as the achievement of goals and objectives. They can, of course, be either creative and actualizing, or constraining and counteractualizing.

Contracts occur among parties--as between a person and a group, organization, or country; between groups, organizations or social systems of any size; or conversely between any such social system and its own subsystems (e.g. between an organization and its

constituent departments, and within departments), between any system or subsystem and individual members. Furthermore, and this is particularly significant, human systems have the unique capacity for contractual transactions with themselves--for reflexive (system-with-itself) contracts. This capacity for reflexive contracts obtains at all levels-of-organization for human systems, from individual (intrapsychic) self-system to international systems--from a reflexive New Year's resolution to the United Nations' "Universal Declaration of Human Rights." Philosophically and psychologically, all contracts between parties are actually secondary to each party's primary reflexive contract (i.e. subjective decision) to enter into the inter-party contract.

For human systems, the language of contract systems theory is contractual requiring that meaning be derived from the nature of the contractual transaction itself--but the transaction invariably considered within the context of the total relevant contractual-field. Again, this applies for human social systems at all levels, intrapsychic to international. Language, itself, in the generic sense, is based on contract, on the reciprocal agreement to accept specified conventions (meanings)--signs, signals, word symbols, and syntax. Communication (and communication theory) invariably involving language (however abstracted or analyzed), and exchange is also conceptualized as a domain (an aspect) of contract theory (Homans, 1961).

For the two inextricable purposes of understanding the human enterprise and actualizing human systems, we have conceptualized the concept of contract as the regnant construct.[5] As the highest-order theoretical construct, contract covers such basic concepts as contract-systems, organizational contracts, contractual transactions, and thus incorporates as key subsidiary or derivative constructs: transaction, exchange, organization, levels-of-organization, reflexivity, and commitment. Also incorporated are concepts that designate specific contract-system arrangements: institution, role, and status; and of course all contractual or related terminology: contract "conditions," "terms," "negotiations," "bargaining," "obligations," "rights," "benefits," "penalties," "cooperation," "competition," "power," "conflict," "costs," etc.

The most significant advance in the social-behavioral sciences today is perhaps the movement toward systematic integration of the social-behavioral sciences (as against fractionation, reductionism, mechanization and dehumanization). Particularly relevant is the integrative work of the exchange and role theorists, Adams (1965);

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[5]In: The Psychology of Personal Constructs, Kelly (1955) details the theoretical-methodological requirements and functions of the "Fundamental Postulate." "A good psychological theory should be expressed in terms of abstractions which can be traced through most of the phenomena with which psychology must deal (p. 44)." It is precisely the fundamental postulate and the regnant construct that must be expressed at this level of abstraction so that, with their corollary constructions, they can track down the entire range of psychosocial problems and happenings.

Biddle and Thomas (1966); Blau (1964); Homans (1961); Kuhn (1963); Levine and White (1961);[6] the transactional psychologists (previously cited) and the "interactional" theorists in sociology and social psychology e.g. Sells (1963); Sherif (1967); Brown (1942); Cooley (1902); Faris and Dunham (1939); Kantor (1959); and Mead (1934).

The Language of Contract

A contract can be defined as an arrangement providing for (or allowing for) the exchange of obligations and benefits. It is a powerful mechanism for generating what Finch (1974) refers to as "reliable, dependable, predictable behavior."

Parties to contracts can be variously defined as the individuals, persons or groups, participating directly or indirectly in the contractual exchange, or secondarily if so specified, as those affected by the exchange. The exchange may take place in the present or future and may take the form of reciprocal expectancies e.g. reciprocal role expectancies. When contracts extend over time, and when future expectancies are involved, contracts become "time-binding," "time-connecting" or "time-scheduling" (Berne, 1961;

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[6]Historically, the concept of exchange as the basis for a theory of human behavior was originally investigated in the 19th century by two theorists working independently. Whately (1831), a political economists in England, propounded what he called the study of "catallactics" or science of exchange (von Mises, 1949). Somewhat later in America, Chavannes (1884), an early sociologist, developed a similar theoretical viewpoint (Know, 1963). Similarly, Cantril and Bumstead (1960) traced essentially the same use of the concept, "transaction," back to the early Greek historian, Polybius, who held that the history of one nation cannot be meaningfully understood independent of its transactions with other countries.

Frank, 1942; Fraser, 1966; Korzybski, 1933; Mowrer & Ullman, 1945). For instance under the Feudal Societal Contract, as it included the "law of primogeniture all status-derived prerogatives, including real property and serfs, automatically passed to the eldest son (Maine, 1861). However, too many instances didn't fit (e.g. no son) and the Will as a contractual instrumentality was introduced to accommodate diversified wishes and to assure that these wishes would be carried out after one's death, reaching from one generation into the succeeding generation (Havighurst, 1961; Hoebel, 1954; Maine, 1861).

Contracts cover the entire range of human exchange. This includes the exchange of commodities or "goods" (an etymologically significant value term) and the exchange of behaviors, expectancies, reinforcements (positive and negative), values, ideas, feelings, contingencies, rights and responsibilities--whatever "currency" serves human purposes. Contractual exchange occurs within and between all levels-of-organization for human systems, and within and between all of the domains or contract spheres of living. Contractual exchange characterizes subjects as diverse as "social institutions" (institutional behavior and the behavior of institutions) and learning theory (including "behavior modification" or operant conditioning procedures).

In modern society every individual is directly or indirectly involved in organizational and institutional contracts (Pratt & Tooley, 1967a; Pugh, 1966; Schein, 1965). Social contracts define institutions and organizations: their values, purposes, polices, rules, and sanctions; their resources and resource allocation systems; their

external and internal systems of exchange including obligations (e.g. tasks, demands, duties, work, responsibilities), benefits (e.g. rewards, rights, privileges, remuneration),[7] and stipulated sanctions for execution of contract and for breach of contract or negotiation of fraudulent contracts. These personal-organizational-societal contracts are ends-means instrumentalities that continually connect sets-of-consequences with sets-of-actions (formally and informally); they are reciprocal give-and-take, give-get, do-receive, to-from systems of contractual exchange.

The dictionary definition of exchange is "to give and receive reciprocally." Institution is defined first as, "an established law, custom, practice, system, etc.": and differentially, it is also defined as, "an organization having a social, education, or religious purpose, as a school, church, hospital, reformatory, etc.[8] Thus, Levinson and Gallagher (1964) use the language of contract and of

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[7]Consider Parsons' (1951) use of the term remuneration: "the attainment of ego's goals then becomes dependent on the relational context in a double way. What he gets depends not only on what he himself 'produces' in the sense in which this is independent of what the alters do, but on the 'terms of exchange' that is, the patterning of his relationship in certain respects to relevant alters. There are, in turn, two aspects of this relational system: first, the regulation of structuring (through settlement of terms) of the 'outflow' process which may be called that of 'disposal' of the product of his efforts to a class of alters; and second, the regulation of the 'inflow' process, the settlement of the terms on which he receives contributions to his goals for alters, which may be called his remuneration (p. 70)." Also cited by Hittelman (1966b) in his discussion of a contractual approach to communication theory and T-group practice (p. 6).

[8]Random House Dictionary of the English Language (Stein, 1966).

contractual exchange (rights and obligations) in their conceptualization of both institutional role and the role of institutions (particularly mental hospitals, prisons and residential schools):

> The client thus becomes a client-member, an inmate of a community that not only offers specific services but also makes manifold claims upon him. His membership in the hospital involves a distinctive contract (Durkheim, 1957; Parsons, 1957; Bidwell & Vreeland, 1963) that defines his rights and his obligations...(p. 34). The "socializing" institution has a "commitment to society; it has a formal obligation to foster the recovery of its patients, and every patient whatever his motivation, takes on a contractual obligation to work toward this end (emphasis mine, p. 39)."

Using this contractual exchange conception of role as the connecting link it is possible to couple a psychological analysis with a sociological-anthropological approach: "we have examined the sociocultural system from the perspective of its psychological meaning, and have examined the individual personality from the perspective of its engagement in the social environment." This provides a basis for comparative study "of various therapeutic-educative-corrective systems, seen from the viewpoint of their client-inmate members (p. 244)."

All role theory that intentionally or by default, attempts to study role or role process per se, disregarding content or context can have little meaning or generalizability. Here "context" of course refers to the contract-system-field including relevant contract-systems at all levels from societal to intrapsychic. This caveat regarding "empty theories" (pseudo content-free) applies equally to all social-behavioral theories e.g. communications theory, learning theory, decision theory; and likewise to all social-

behavioral classification systems or taxonomies. As long as contextual stability obtains a conceptually narrow model may work quite well. However, to the degree that relevant content and/or context are ignored, crucial sources of variance may be overlooked. Models can "get by" treating a "thin slice" of reality as if it were stable, static, self-contained, in vacuum, or absolute, only at the risk of basic misconstruction.

In a review of Patienthood in the Mental Hospital: An Analysis of Role, Personality and Social Structure (Pratt & Tooley, 1967b) one can find an indication of the conceptual power of the language of contract in providing a higher-order construct with which one can relate and thus explicate subsidiary concepts in the critical review of current literature. Under the title "Flattery Will Get You Somewhere: Styles and Uses of Ingratiation," (Jones, 1965) we find a similar illustration of the use of the language of contract in a substantive overview of a significant book (Jones, 1964). Consider a sample from the section headed, "Breaking the Social Contract"--

> But how do we determine when behavior is "legitimate"? Relationships and associations involve, in normal circumstances, an unstated contract between the actors. Different authorities describe this contract in different ways. Sociologist Erving Goffman (1959), in his book The Presentation of Self in Everyday Life, emphasizes what he calls "ritual elements" in social interaction. Goffman believes that not only does communication take place in its usual sense but the communicators also engage in a "performance"--each transmits and receives clues about his definition of the situation, his view of himself, and his evaluation of the other. Mutual adjustment occurs. Perhaps most important the actors enter into a

> silent compact to help each other save face. Each becomes involved in "face-work"--give-and-take actions that smooth over potentially embarrassing threats, lend mutual support, and make for coherent and consistent performances. Each person has a "defensive orientation toward saving his own face and a protective orientation toward saving the other's face." Within this frame of reference, the ingratiator may be seen as exploiting this contract while seeming to support it. He neither violates the contract openly, nor merely fulfills it. Rather, he keeps sending out reassuring signals that he accepts the terms of the contract; but all the while he is actually working toward other goals (Jones, 1965, p. 20).

Murray intended his "personology" (Sahakian, 1965) to be a science of men and a method of inquiry. He conceptualized personality as a "temporal integrate of mutually dependent processes (variables) developing in time"; and explanation of a single one of these variables involves the recognition of a large number of others and their reciprocal relations (p. 210). Murray used the language of contract extensively, as in his conception of the "Ego system".

> Everyone has experienced "resolving to do something" or "selecting a purpose".... Decisions and intentions of this sort--"accepting a goal," "planning a course of action," "choosing a vocation," as well as promises, compacts and "taking on responsibility"... all of them (are) related to time-binding and the establishment of expectations and levels of aspiration.... We should say that such conscious fixations of aim were organized to form the "Ego system." The concept of Ego emphasizes the determining significance of conscious, freely-willed acts: making a resolution (with oneself) or a compact (with others) or dedicating oneself to a life-long vocation, all of which "bind" the personality over long periods of time.... One index of the degree of structuration or strength of the Ego is the ability of an individual to "live by" his resolutions and compacts (Sahakian, 1965, p. 236).

Hittelman has developed aspects of contract psychology for critical and experimental application to the prediction of changes in interpersonal attraction (1966a); T-group theory and practice (1966b); and to major sociological and psychological theories of psychosocial deviance (1966c). He, again, emphasizes reciprocal behavioral expectancies, "A contract is the mutually agreed upon (explicitly or implicitly) expectations for behavior between two or more parties with the rewards (and sanctions) for meeting (or violating) that expectation. It implies not only the behavior expected, but also the conditions and reservations under which the expectations are held (1966c, Pp. 4-5)."

Contemporary learning theorists, suffering from a legacy of self-imposed conceptual constraints, are currently turning to the language of contracts to liberate even the most "operational" operant conditioning procedures from the triple cul-de-sac of an "atheoretical" stance; a "value-free" posture; and an "empty organism" (S-R versus S-O-R) paradigm (Johnson, Dokecki & Mowrer, 1972).

Sulzer (1962), for instance, must feel that he's found conceptually strange company when he joins Menninger (1958) and Szasz (1965) in writing extensively about the "therapeutic contract." Though in this instance followed by something of a non sequitur Rickard and Dinoff (1965) likewise make explicit use of the language of contract in their case histories:

> Perhaps the prime techniques used in eliciting adaptive behavior from Bill was emphasis upon the terms of the contract. Whenever Bill refused to take part in activities or to comply with camp regulations alternate channels were pointed out

> to him and the expected behavior was clearly labeled in a nonpunitive, nonjudgmental manner (p. 327).

The training films produced by Krasner and his colleagues showing their work with autistic children vividly present the contractual negotiation and exchange process, including specification of conditions, choice, and reciprocal action-consequence sequences: "You give me that and I'll give you this; If you do that, I'll do this, If you do that then you'll get to do this." A structured series of contractual exchange events proceed in a manner designed to evoke and reinforce desired behaviors. Reciprocal expectancies are generated for child and "therapist"--when the child gives or does (contingency behavior) he finds that he has a right to expect to get, or to get-to-do (reinforcing behavior or event). Both parties are reinforced--the child gets (gets to eat) the piece of candy and the therapist gets to play his game and to believe in his hypothesis through out-come determined consequation.

As Krasner (1964), Ferster (1965), Homme (1965), and several others (Ullmann & Krasner, 1965; Ulrich, et al., 1966) have done, Goldiamond has made major theoretical and empirical contributions toward a more enlightened and sophisticated behavior theory, particularly in such underdeveloped areas as reflexive or self-reinforcement and self-control, and the connection of contingencies and consequences with value-theory and ethics (Kanfer & Phillips, 1972; Tooley, 1966a).

Goldiamond (1965) states unequivocally that, "The aim in behavioral modification of the type we have been using is to alter those behaviors about which a contractual agreement has been made implicitly or explicitly (p. 254)."

Addison and Homme (1966) employ the language of contract in extending operant conditioning concepts into a comprehensive motivational system[9] that includes the concept of "coverants" in the reflexive self-management of contingencies. They use the terms "contracting systems," "contractor" and "contingency contracts" to specify the operational relationships between "contingent behaviors" and "reinforcing events" (a conceptual alternative to the limiting construct "reinforcing stimulus"). In an important essay, "Contingencies of Reinforcement in the Design of a Culture," Skinner (1966) emphasizes the role of reinforcing events and contingent behaviors in optimizing human systems at individual and societal levels. The discovery and development of reinforcing properties is equated with the "history of the discovery of human potentialities" both positive and negative (p. 163). Skinner stresses the actualizing role of the contingent behavior in

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[9]In 1966 I published a paper discussing the use of "contract management" as an effective method of changing behavior. About the same time, Lloyd Homme (1966) began writing about what he called "contingency management." Behaviorally we were both using the same technique. Putting our heads together (Homme, 1966) we settled on terming the technique "contingency contracting" (Homme, 1969) although one occasionally sees the term "contract contingency management" (Kanfer & Phillips, 1970, 1972).

carrying out the work of the world.

> Men are happy in an environment in which active, productive, and creative behavior is reinforced in effective ways. The trouble with both affluent and welfare societies is that reinforcers are not contingent on particular forms of behavior. Men are not reinforced for doing anything and hence they do nothing. This is the "contentment" of the Arcadian idyll and of the retired businessman. It may represent a satisfaction of needs, but it raises other problems. Those who have nothing important to do fall prey to trivial reinforcers.... Only when we stop using reinforcers to allay needs can we begin to use them to "fulfill man's nature" in a much more important sense. Contingencies of reinforcement are far more important than the reinforcers they incorporate, but they are much less obvious. Only very recently, and then only under rigorous experimental conditions, have the extraordinary effects of contingencies been observed.... The experimental analysis of behavior thus has a very special relevance to the design of cultures. Only through the active prosecution of such an analysis, and the courageous application of its results to daily life, will it be possible to design those contingencies of reinforcement which will generate and maintain the most subtle and complex behavior of which men are capable (p. 166).

It can readily be seen that for behavior theory the concept of contract covers the exchange of <u>obligations</u> and <u>benefits</u> which are translated as <u>contingencies</u> (reinforcing stimuli) and <u>consequences</u> (reinforcing events). The traditional proclivity of behaviorists for protean forms of S-R reductionism can be reduced when behaviors are analyzed at the level of the "contractual unit."

When behaviorists use the term "operant," they are by definition referring to a <u>means</u>, a behavioral means to effect certain environmental consequences. As all means are inextricably connected with ends and all ends represent values, operant psychology becomes an ends-means

psychology with a primary (inescapable) normative component. Without exception, all of the specific operational referents of the term "reinforcement" are value-defined. By operational definition contingency contracts are invariably contingency-consequence contracts, they are contingency (means)-consequence (ends) contracts, therefore, ends-means contracts. The reinforcement-obtaining values of contingencies (of contingency behavior) are learned through the individual's contractual transactions with his environment. If not for rats at least for man, reinforcement valence is largely ascribed ("catected")[10] rather than exclusively intrinsic to given stimuli or events (Koch, 1963). Thus, reinforcement valence cannot be accepted as an invariant given but must be treated as preferential behavior (Becker & McClintock, 1967).

These considerations crucially qualify and must be explicitly dealt with in all behavioral models that attempt the "classification of behavior (or behavior disorders) in terms of maintaining consequences" (Ferster, 1965; Goldiamond, 1965).

In summary, then, the following philosophical assumptions characterize the contractual model of human behavior and social organization:

> All theories of behavior implicitly or explictly postulate a model of humanity.
>
> It is asserted that the essence of humanity is in the capacity to make and execute contracts.

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[10]Because the valence of reinforcing stimuli are so frequently ascribed an interesting phenomenological treatment of behaviorism is now possible.

The contract, as a theoretical construct, is the basic level of analysis for human behavior and social organization.

To understand the process of contracting, auxiliary constructs of exchange, role, contingencies and consequences must be used.

CHAPTER II

THE EPISTEMOLOGICAL AND ONTOLOGICAL ASSUMPTIONS OF CONTRACT SYSTEMS THEORY

All models try to delineate reality and, as within the contract model, also may serve as instruments in shaping reality to man's purposes. From the contract perspective, knowing proceeds through the "participant-observation-intervention" of "man-in-the-universe."[1] We speak, therefore, of the epistemology of ontology, of knowing and the existential reality of the knower and the known, of becoming and the "to-be-known." Thus, theoretical models are shaped by epistemology and ontology whose basic assumptions, explicitly or implicitly, reach through each and every model.[2]

Epistemology refers to the process of knowing, the relationship of the knower to the known, to man's reflexive study of man and his

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[1]For this transactional-field epistemology even the concept "observation" would be analyzed within the transactional-field as comprised of: (1) observer; (2) the system observed; (3) the observational process per se; (4) the observational or protocol data; and (5) the inferential products of observation (theories, laws, hypotheses). All of these aspects of observation are treated as being transactionally interrelated (Pratt & Tooley, 1968; Tooley & Pratt, 1964).

[2]In all scientific work, theoretical or experimental, one chooses and acts in terms of underlying assumptions whether he knows it or not. In his "metatheoretical analysis of the role of assumptions" Handlon (1960) emphasizes that, "Whenever a worker in the area of mental disorders goes about his job--be he therapist, theoretician, or research investigator--he carries around with him certain assumptions.... At whatever level of awareness these assumptions reside, they obviously exert a pervasive influence upon what the worker does (p. 43)." The role of implicit, as well as explicit, assumptions is receiving increasing attention in the literature. See Newbury's, The Siginficance of Assumptions and Philosophic Operations in Psychological Methodology (1958); Van Kaam's Assumptions in Psychology (1958); Barber's Resistance by Scientists to Scientific Discovery (1960); and Kaplan's, The Conduct of Inquiry: Methodology for Behavioral Science (1964).

surroundings (Grene, 1966). All scientific inquiry and all social action--the sciences, humanities, and the arts--are all aspects of the human endeavor, forms of human action and thus part of the historical purview of psychology (Boring, 1929; Popper, 1972). As all of the social-behavioral sciences are ultimately based on human behavior and human relationships, psychology becomes, as Stevens (1936) said, "the propaedeutic science." In his compelling call for theories of complexity and prodigality, "Psychological science versus the science-humanism antinomy: Intimations of a significant science of man." Koch (1961) put epistemology in psychology's lap, "It is, incidentally, my growing conviction that many problems still allocated to epistemology will receive little further clarification until they are recognized for the psychological problems they are (p. 637)."

As have others (Dewey & Bentley, 1949), Pratt and I earlier presented a taxonomy of epistemologies which takes the position that all epistemologies can be ordered into one or another of three fundamental types: (1) auto-actional epistemologies; (2) inter-actional epistemologies; (3) trans-actional epistemologies (Pratt & Tooley, 1967d; Pratt & Tooley, 1968). The choice between these three epistemological positions is crucial for the construction of specific models of behavior (Dubin, 1969). The conceptual advantage of the transactional approach is being increasingly recognized for psychology, psychiatry, communication theory, education, biosocial sciences, and

for science generally.[3] In Explorations in Transactional Psychology, edited by Kilpatrick (1961a), we find the following:

> Our work has been aimed at a systematic examination of such problems (i.e. in the field of perception), and out of this examination there has been developed a basic formulation concerning the nature of knowing and of observation.... This basic theory is one which has else where been called "transactional." According to this view, living is an enormously complex evolving process which includes space and time and environment, as well as the organism, in an indissoluble whole. A segment in time of this process may be labeled a "transaction" (Dewey) or "occasion" (Whitehead) in which all aspects of the process are contained, including purposes, past experience in the form of assumptions, and the future in the form of expectancies. Cantril (1950, p. 59) explains this position in the following way: "Each transaction of living involves numerous capacities and aspects of man's nature which operate together. Each occasion of life can occur only through an environment; is imbued with some purpose; requires action of some kind, and the registration of the consequences of the action. Every action is based upon some awareness or perception, which in turn is determined by the assumptions brought to the occasion. All of these processes are interdependent. No one process could function without the others (p. 3)."

Epistemological consideration of the total relevant contractual-field from the transactional perspective helps prevent reductionism--whether intrapsychic as in psychoanalytic or cultural or as in

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[3]That the transactional mode of inquiry may prove to be the most productive for all fields of inquiry is illustrated in the work of Bentley (1935, 1954); Dewey & Bentley (1949); Cantril, Ames, Hastorf and Ittleson (1949); von Bertalanffy (1952); Cantril and Bumstead (1960); Berne (1961); Grinker, MacGregor, Selan, Klein & Kohrman (1961); Kilpatrick (1961a, 1961b); Miller (1965); Cantril (1964); Hayakawa (1955); Bauer (1966); and Spiegal (1971) among others.

[4]One extreme is to regard all behaviors as being initiated completely from within the organism. "The one-sided inadequacy of this view is what so often has called out an equally one-sided opposed view, according to which the organism is wholly passive, and is gradually molded into shape and adapted to living by independent environmental conditions, mechanistically treated. Both of these views, one as much as the other are alien to us (Dewey & Bentley, 1949; p. 143)."

absolute cultural relativism (the person as putty).[4] Transactional epistemology, by requiring that meaning be derived from the nature of the transaction itself, also precludes both the mechanistic and reductionistic misinterpretations of whole and part processes characteristic of most traditional theory and practice (Cantril, 1964; Hayakawa, 1955; Kilpatrick, 1961).

The contract as a theoretical construct represents the conceptualization of a higher-order (exclusively human) form of transaction. Contract systems theory employs an explicitly transactional epistemology, which it extends into a "field-theoretical" approach.

Now to shift to the problem of ontology. For ontology, the search (and research) is for the most useful key conceptual tools with which to explicate and articulate the nature of "being," of "being-in-the-world," and the "world-to-be-known." Put pragmatically, the question is what are some of the most useful ways for laying out patterns for the reality of an every-changing world.

Contract systems theory puts together all the major pieces of the pattern through the conceptual architecture of its heuristic-normative-nomological-network. Not a simple construction but economical considering what it covers.

This level-of-accounting links ontology with epistemology through the common-ground concept of "transactional-field" which they substantively share. The transactional-field (contractual-field for human systems) encompasses the human enterprise (human "condition," "predicament") through the concept of "transactional-field" which

has its conceptual-methodological roots in several significant theories and constructs. These include: Feibleman's (1954) theory of "integrative levels"; Novikoff's (1945) concept of "levels of organization"; Weaver's (1948) "theory of complexity"; Kantor's (1953, 1959) "levels of participant-observation" and "levels of interpersonal interaction"; and Kaplan's (1964) "levels of abstraction." Within the total contract-systems field, we are concerned with human systems at all levels, from interior "intrapsychic" contract-system space to international contract-system space. As systems at the various levels are transactionally interrelated, change in any one may be contingent upon change in related systems (to one degree or another; to what degree being a matter for empirical determination).[5] As each different system can only be understood in relation to others, to study (or change) any one system at a given level nothing less than a general systems theory can be adequate. Thus, our contractual-field concept combines theories of levels with general systems theory (von Bertalaffy, 1962).

Another basic epistemological-onotological problem is reflected in the need for conceptual tools with which to link theories with empirical events. Since Bergman and Spence's (1941) excellent discussion of the theoretical and empirical components of science

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[5]Take for example the current energy shortage as a single variable that effectslevels of systems from the individual to the international.

appeared over twenty-five years ago, several theoreticians have conceptualized the complementary interrelationships of science's empirical and theoretical elements in various forms. Margenau (1950), for instance, has elaborated a spacial paradigm comprised of blending planes of existence, the inferential or Conceptual Plane (C-Plane) connecting with the empirical, observable or Protocol Plane (P-Plane).[6] Dealing with the same problem, Feigl and Scriven (1956) first introduced the notion of a "nomological net" to encompass and relate the various levels of theoretical constructs with their referential events. These schema, including Kaplan's (1964) "empirical-theoretical continuum," can be selectively combined and then used in connection with Northrop's (1947) concept of "epistemic correlation" which provides for "indices of correspondence" between C-Plane and P-Plane i.e, between theoretical constructs and empirical events.

Contract systems theory gives high priority to the incorporation of questions of value and human purpose--to the axiology of praxiology (Kotarbinski, 1965). Value theory and action theory are conceptualized

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[6]Whether one chooses to consider the P-Plane as operational data per se, as perceptions, phenomena, on noumena, or as simply a first-order conceptual function is an interesting question but too specialized for this purpose.

Attempts have been made to differentiate the concepts of "theory," "system" and "models" in science on the basis of whether or not they link the C and P-Planes or are confined to relationships exclusively within one or the other of the two planes. An analogous differentiation between the terms "construct" and "concept" has often been advocated. These differential definitions, however, have not stuck too well and the terms are frequently used interchangeably.

as transactionally coupled and as an inextricable part of the total transactional-field (Brooks, 1973) extend Feigl and Scriven's nomological net to incorporate hierarchical levels of ends-means configurations. Thus, the nomological net becomes a normative-nomological network. By combining the nomological net with the normative net, we place the theoretical-empirical components of existence (Margenau) within an ends-means context: the normative-nomological network. Thus, it is possible to also extend Northrup's construct of "epistemic correlation," defining the degree or correspondence (validity) between theory and its empirical referent, to include value-theory, to include the degree or correspondence between a given value theory and its specific empirical referent (Rapoport, 1953).

If one posits a transactional relationship between ends and means, then "ends-means" must be treated as inseparable (irreducible) configurations. Scientific inquiry, the arts, ethics, the humanities--as human endeavor--can be considered as ends-means activities (Aschenbrenner, 1972; Weinberg, 1970). Churchman, in Prediction and Optimal Decision, (1964); Rapoport, in Operational Philosophy: Integrating Knowledge and Action, (1953); Cattell (1973) in Objective Knowledge have each developed this argument in great detail with an emphasis on experimental, mathematical and operational constructs. They all present an excellent analysis of ends-means taxonomies. Kluckhohn and colleagues (1952) have done likewise and have also covered much of the current thinking on the complex interrelationships

(if not "identity") of "fact" and "value."[7]

In discussing the relationship between normative and existential (i.e., nomological) propositions Kluckhohn agrees with Lepley (1943) who in his paper, "The Identity of Fact and Value" points out that:

> The belief that valuative statements as expressive of means-ends relations are inherently different from scientific propositions as denoting cause-effect relations has apparently risen, as has the view that valuative sentences are less verifiable than factual statements, from failure to see that the whole gamut of events and relations can be referred to by both forms of statement... (p. 391).

Kluckhohn (1952) also concurs with the Cornell value-study group that,

> The concept "value" supplies a point of convergence for the various specialized social sciences, and is a key concept for the integration with studies in the humanities. Value is potentially a bridging concept which can link together many diverse specialized studies--from the experimental psychology of perception to the analysis of political ideologies, from budget studies to economics to aesthetic theory and philosophy of language, from literature to race riots....
>
> Sophisticated use of value-theory can help to correct the wide-spread static-descriptive bias of social sciences. The pervasive emphasis, for example, upon static-equilibrium theories in economics; upon "social structure" in sociology: upon static "need-reduction" theories of personality in psychology (p. 389).

Epistemologically speaking, all knowing, including scientific inquiry as a course of action, proceeds through explicit or covert ends-means activities involving a complex series of valuations or judgments e.g. decision to investigate in the first place, formulation of any given problem, selection of methodology, decisions regarding significance levels, utilization of feedback to modify theory and

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[7]See particularly their chapter "Values and Value-Orientations in the Theory of Action: An Exploration in Definition and Classification" in Parsons' Toward a General Theory of Action (1952).

methodology, etc. (Brooks, 1973).[8] The social psychological experimental literature reflects a new and growing interest in the empirical investigation of ends-means attributable sources of variance (MdGuigan, 1963; Riecken, 1962; Rosenthal, 1963a, 1963b, 1964; Sarason, 1951).

Historically, traditional experimentalists have characteristically given intrusive value-variance the ostrich treatment. They have tried to control it directly, or to statistically control it--to "partial it out." Trying the opposite tack, there are methodologies through which ends-means variance could be purposively "partialed in" and put to work. Also, in addition to showing how "experimenter variance" and "experimental situational demands" (Orne, 1962) can be exploited, we have pointed out how such shibboleths as subjects' "Knowledge of hypothesis" or "personal-stake-in-outcome" can be made an explicit part of the design in "participant-social-action-research" (Epstein, Suedfeld & Silverstein, 1973; Pratt & Tooley, 1967d; Tooley, Pratt & Rosenthal, 1964). Whether one tries

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[8]Smith (1954) makes the same point in relation to scientific and professional responsibility: "The psychologist cannot stop making choices, as scientist, teacher, therapist, or human engineer. The choices may be witting or unwitting, responsible or irresponsible, but they are made and they entail consequences... the claim to a value-free science... only obscures the value elements in the choice of the problem, of research setting, of conceptual framework, in the decision to rest with negative findings, when results are reportable, and so on endlessly. Only if we know what we are choosing, only if the values involved in our choices are explicit, do our decisions become responsible ones (p. 515)."

to avoid the embarrassment of having ubiquitous value-connected variance cropping up as unwelcome "error variance," or whether one plans to exploit ends-means variance by putting it to work--in either case it must be identified for what it is. Thus, to be scientifically honest or to maximize payoff, all ends-means derived sources of variance (whether associated with subjects, experimenters or other "situational demands") must be made explicit for all scientific inquiry, in laboratory or in situ. I have labeled this methodological requirement "the principle of axiological specification" (Tooley, 1965; Tooley, Pratt & Rosenthal, 1964)[9] which will be explicated in the following chapter.

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[9]Though not appreciating the positive potential of value-derived variance, Myrdal (1944) did realize that the epistemological doctrine of Wertfreihert was doomed to failure: "Valuations are present in our problems even if we pretend to expel them. The attempt to eradicate biases by trying to keep out the valuations themselves is a hopeless and misdirected venture.... There is no other device for excluding biases in the social sciences than to face the valuations and to introduce them as explicitly stated, specific, and sufficiently concretized value premises (p. 1943-1944)."

Newbury (1958) has emphasized the need to make implicit philosophical assumptions publicly available to the scientific community, "However much understanding of his own meanings a psychologist might have without conscious definition of his own philosophic operations, he could not be expected to understand adequately the concepts communicated by others without knowing their philosophic operations. Professor Boring's History of Experimental Psychology is monumental evidence of this fact (p. 190)."

Axiological specification is crucial for scientific operations generally, and particularly for those dealing with human behavior.

A model that incorporates both axiology and praxiology is crucial for theories of action or change-agentry for systems theory (Brooks, 1973; Kuhn, 1974). It is for this reason that Feigl's objectivity-delineating nomological-net must be enlarged into a normative-nomological network making explicit value parameters of the systems involved.

When we lay out a scientific pattern for reality, we set out to look for variance. For scientific inquiry, variance is the name of the game (Popper, 1972). Now we have said that our network was to be an heuristic network. By heuristic I mean creative, educational ways in which to engage reality and ways to get at reality (and variance) from several perspectives:

1. What is (the basic descriptive process)
2. What can be (given what is, under existing circumstances)
3. What could be (contingent upon genotypic or radical change: "if so, then so")
4. What ought to be (relatively "intrinsic" to highly relative)
5. Emergent nomological conditions (substantive, process, events--such as the reality of new theories and constructs)
6. Emergent ends-means configurations (within open-ended heirarchical ends-means systems)
7. Emergent potentialities (as contrasted with the Aristotelian concept of potentialities invariably being pre-set, intrinsic to the organism or system)
8. Creation of new existential realities (normative and nomological)

This heuristic perspective serves to discover (approximate) what is, explore what can or could be, stimulate innovation and continuously create new psychosocial realities (Boguslaw, 1968; Churchman, 1972).

In this version of an heuristic model I consider "discovery" and "invention" to be transactionally related aspects of social action or scientific inquiry which are carried out within the context of the larger, relevant transactional-field. Though Asher's (1964) distinction is semantically somewhat arbitrary, it is conceptually sound:

> There is a distinction between discovery and invention which should be discussed. Discovery seems to refer to a new concept which gives fresh understanding to an existing structure such as Harvey's concept of how blood-circulation functioned. The discovery of a new concept for some aspect of an existing structure or existing system transforms that which was invisible into something which is visible. And once visibility is achieved with the new concept experiments can be designed to test the veracity of the proposed concept. Invention is to create structures or systems which were not previously in existence such as Edison's electric light or Bell's telephone. For psychology, both discovery and invention are relevant directions of work but the latter should be more predominant. For example, if we are interested in how behavior functions, this research activity results in discovery. If we want to evoke or even modify human behavior, this will require invention (p. 88).

Tart and Creighton (1966) shift the emphasis even further when they state that, "The basic philosophical or existential assumption is that we do not discover our answers in life, we create them (p. 3)." Schaefer states that, "Modern science can affect life patterns in two ways: (1) by an analysis of human behavior, and (2) by creating new conditions of life (Schaefer, 1967, p. 1)."

From the heuristic viewpoint, the representation of "present" reality is conditioned by potentialities for change: change through expected or unexpected emergents or through direct intervention. As Lewin said, one can only understand a system by changing it. And (by Gödel's 1963 theorem) one can only change a "closed" or complex system by transcending it: the conceptual-methodological breakthrough (Kuhn, 1962). "Hard facts" can never be treated as anything more than systems of inferences derived from sets of assumptions (Popper, 1972). The hardest of hard facts are still approximations of approximations, frequently up-ended by unpredicted (if not unpredictable) emergents or by restructuring of the relevant field (Kuhn, 1962).

In the social-behavioral sciences as in the physical sciences, this heuristic approach takes into account and attempts to exploit not only the concept of "degrees-of-freedom" but also of the totally unpredictable "surprise," of <u>qualitative</u> change where <u>quantitative</u> change was predicted (Bronowski, 1956; Heisenberg, 1958, 1971; Oppenheimer, 1956). This heuristic open-point-of-view provides for evaluation of degrees of system openness and of the relationships between closed and open-systems. Thus the present "variance potential" of "futures" can be formulated as hypotheses (often as "outrageous

hypotheses") to be empirically tested sequentially over time (Lynd, 1939).[10] It is interesting that two decades ago, from a behavioristic learning theory orientation, Shaw (1948, 1949a, 1949b) first introduced the concept of "bringing home" future consequences. He used this notion of connecting distant or long-range consequences with present conduct as the key concept for this theory of psychotherapy. The failure to make or maintain time-binding connections between positive and negative future consequences and present actions was central to his theory of psychological disorders (Mowrer, 1947; Mowrer & Ullman, 1945).

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[10]Murphy (1963) devoted a significant section of his paper on major trends and future developments in psychology to the overriding need for outrageous hypotheses, "Only insofar as he encourages outrageous hypotheses and dares entertain notions which are anathema to his scientific brethren, can he really pry loose the lid of the Pandora box in which all the exciting bugs and all the frightful stingers lie. Partly he will get into these new paths by trying to use the existing paths to change things. He will, as Marx suggested, decide that it is impossible to know what reality is, but that it is possible to learn something about it by changing it. My eyes were opened and my brain sobered one day in a conversation with my colleague, C.M. Solley, with whom I was talking about some research problems as to the nature of human self-deception. I said very solemnly to Charlie, "I've looked down from the hilltops into the valley many times, trying to see the point from which that path down in the valley leads on up to the hilltops." With a broad grin, he replied, "But, Gardner, there isn't any path there. You have to make that path." This is more than extrapolation. This is what the really significant scientists will have to do. This really is the reason why sheer extrapolation along known paths, though yielding exquisite results, will usually fall short of the great discoveries. This is why the visionary will go far beyond the hay-foot, straw-foot extrapolator (p. 693)."

The purpose of this chapter has been to present the basic epistemological and ontological assumptions of contract systems theory. The point has been to not overlook any major sources of variance; to cover the maximum relevant sources of variance that can be put to work for human purposes; and to treat these purposes themselves as an integral part of the social reality (Friedlander, 1972). "Representativeness of circumstances" is better assured through the heuristic-normative-nomological-network. This conceptual synthesis represents a more comprehensive frame-of-reference than Feigl's original construct of nomological net. This comprehensiveness is not to complicate scientific or social inquiry but to simplify it, to make it at the same time increasingly more effective for the ultimate purpose of human actualization (Dubos, 1970).

To summarize this chapter, the following points are highlighted:

The explicit, conscious choice of a transactional epistemology over more primitive auto-actional and interactional epistemologies.

The inescapable place of values in all human affairs--including the study of behavior--necessitates the inclusion of an axiological component of science as well as the theoretical and empirical components.

The study of variance, in all its forms, is the basis for scientific inquiry.

To study variance comprehensively, a general systems approach is preferred.

New social realities are more often created or invented than discovered.

CHAPTER III

AXIOLOGICAL SPECIFICATION: AN ALTERNATIVE TO SCIENTIFIC OBJECTIVITY

For over thirty years the social and behavioral sciences have been struggling with a new mandate. This mandate was perhaps first forcefully articulated in 1939 by Robert S. Lynd in his impressive volume, Knowledge for What? and brought home twenty years later by C. Wright Mills (1959) in The Sociological Imagination. In essence this mandate calls upon members of the social and behavioral sciences to reassess their professional-scientific contract and apply their skills and knowledge to the social problems and international crises of our time:

> Social science is not a scholarly arcanum, but an organized part of the culture which exists to help man in continually understanding and rebuilding his culture. And it is the precise character of a culture and the problems it presents as an instrument for furthering men's purposes that should determine the problems and, to some extent, the balance of methods of social science research (Lynd, 1939, p. ix).

Implicit in Lynd's remarks is an important shift of the ends-means relationship between science and society. This shift requires that science no longer remain an isolated social institution with no purpose other than the creation of new knowledge; it must in addition become a higher-level means of accelerating the progress of the civilization from which it has sprung (Dubos, 1970; Friedlander, 1972; Gouldner,

1970).[1]

In this new mandate, then, is the modern genesis of the prescriptive sciences (Watson, 1967). These new, emergent sciences go beyond the traditional scientific functions of description, prediction and control, taking on the specifically normative function of specifying alternatives of "what could be" as well as the function of devising strategies and methodologies for transforming "what is" to "what could be" (Pratt & Tooley, 1968). This explicitly normative, social conscious orientation has been variously expressed in intervening years and has taken such forms as: "policy science" (Cantril, 1967; Lerner & Lasswell, 1951), "action anthropology" (Borman, 1960, 1963; Redfield, 1963; Tax, 1952), "action psychology" (Pratt &

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[1]This ends-means reversal has been succinctly put by George Sarton (1962):

> Science must be humanized, which means among other things that it must not be permitted to go on a rampage. It must be an integral part of our culture and must remain a part of it subservient to the rest (p. 185).

Sarton's view is somewhat lopsided, however. A transactional perspective in which science and the broader culture could serve to enhance and control and thereby actualize each other reciprocally seems more appropriate to the best interests of each (Blissett, 1972).

Consider also the purpose of Harvard Research center in Creative altruism: "The moral transformation of man and man-made universe is the most important item on today's agenda of history (McEwen, 1963, p. 29)."

Tooley, 1967d), the "new sociology" (Horowitz, 1964; Mills, 1959) and the emerging "social design perspective" in sociology (Boguslaw, 1965, 1968; Tooley, 1974). It is also reflected in recent attempts to integrate the axiological aspect of science with its theoretical and empirical components and thus bring an integrated "science of man" to bear on the problems of mankind (Becker, 1968; Pratt & Tooley, 1968).[2]

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[2]Ernest Becker's (1968), The Structure of Evil: An Essay on the Unification of the Science of Man, is one of the most ambitious attempts to relate the science of man to the problems of our times:

> Measured against the needs of the times there is nothing remotely resembling a science of man: there are only mountains of disciplinary journals, and hordes of busy specialists; what is their effectiveness in relation to the momentous problems of survival and human dignity in our time? To ask the question is already to answer it: taken separately, most of the disciplinary activity in the social sciences represents trival work. True, it is hard-working, certainly well-intentioned at times deeply hopeful and anxious--but still somehow very much beside the point of the problems of man in contemporary society. Many social scientists are of course stoically unconcerned about relating science to the problems of their time. They cling to the faith in disinterested cumulative science, and believe that science will somehow automatically benefit man, if only it is left alone and heavily subventioned. Judged by the needs of the times this faith seems arrogant; judged by the evidence of history, it is naive--and science judges on evidence. Even more, judged by history, this faith in some future apotheosis of science is a teleology that is absolutely and blindly in error. The physical sciences took three hundred odd years to demonstrate it; the social scientists have been trusting in their future for over a century and a half. Meanwhile, the world continues to be manipulated by politicians in power, by warlords and special-interest groups who scoff at social science, or use what they know to further their own profit, and by hate and fear (Becker, 1968, Pp. x-xi).

Indicating ties between professional responsibility and social concern on one hand, and what scientists know and the social problems of the world on the other, Robert Lindner (1952) clearly stated the professional obligations inherent in the new mandate for the social and behavioral sciences:

> Together with many other psychologists I hold that the data of our science place a certain responsibility on those of us who study it, and especially upon those of us who practice its arts of application. It seems to me that there is a straight line from what we know to what we must do about this knowledge. I believe that discovery and conviction oblige action. Accordingly I believe that it devolves upon psychologists to place themselves in the vanguard of those forces which are operating for social change, for the improvement of the world as place to live in, for the betterment of the human condition (p. 216).

At the same time Warren Bennis (1963b) has emphasized the new action value-orientation for social and behavioral scientists as change-agents:

> These signs, and others to be detailed, all point in the same direction: toward an emerging action role for the behavioral scientist. While there has always been a liaison between social knowledge and action...it is my contention that this new role is qualitatively different from former utilization of knowledge. It is based on better and more differentiated laws of human behavior; it receives its impetus as much from the urge to improve society as from simple curiosity about its working...it grows out of the experience of a number of social scientists as practitioners, who are as intimately involved in affecting change as they are in studying it.... In short, behavioral scientists are not only <u>interpreting</u> the world in different ways; some intend to <u>change</u> it (Pp. 126-127).

Parallel to these events, and at various points intersecting, we are witnessing the rapid development of new social and behavioral science technologies and the concomitant growth of new prescriptive or operational disciplines (Ruesch, 1966) that are set to bring about social change. These new[3] professional hybrids cross many disciplinary lines and include:

Operations analysts
Communications engineers
Computer programmers
Systems analysts
Behavioral engineers
Management scientists
Systems engineers
Social planners
Information scientists
Social systems designers

We are particularly concerned with these disciplines because (1) social and behavior change are their defined goals, and (2) the discrepancy between the operations of their practitioners and the philosophical model of science they espouse presents a clear-cut case of the inadequacy of a prevailing scientific paradigm (Kuhn, 1962; Watson, 1967). The paradigm in question,

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[3]Other "older" professions also fall squarely within the prescriptive domain including educators, politicians, psychotherapists, military officers, lawyers, clergymen and government officials. Yet beset by a pseudo value-free philosophy on one hand, and the lack of a rational axiological basis for a science of operations on the other, they frequently fail to conceptualize their professions as prescriptive disciplines. Unfortunately the newer disciplines are in large part guilty of the same axiological peccadillo.

of course, is the wertfrei concept of science which is modal (if not model) in these operational disciplines and the social sciences more generally. Practitioners of these disciplines habitually act like "value-free" scientists[4] while their daily operations typically consist of:

(1) Arriving at axiological decisions regarding the goals and objectives to be achieved,

(2) Making praxiological decisions between the alternative means available,

(3) Limiting the range of behavioral alternatives in given man-machine and social systems and frequently specifying the negative and positive sanctions to accompany the prescribed behaviors,

(4) Applying their prescribed technology to goals prescribed by themselves or, for the Gurkhas in the ranks, ends specified by management, the military or whomever the "client" might be.[5]

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[4]This role they pull off with less than Stanislavsky precision and credibility in spite of the fact that most were thoroughly drilled in the "value-free" lore prevalent in most graduate school departments. To the extent they do make the role believable to themselves and others, these people are victims of Veblen's (1899) "trained incapacity" and Warnotte's (1937) "professional deformation" (Denzin, 1974).

[5]Elsewhere we and others (e.g. Baritz, 1960; Horowitz, 1963; Kaplan, 1964; Roth, 1962) have criticized professionals' uncritical acceptance of the values of their clients (Pratt & Tooley, 1968). Typical of this professional value-orientation is that found among many management scientists and systems analysts and has been elegantly stated by Smith and Marney (1961) in their definition of the mission of management science: "To recommend to a client a DECISION in terms of his VALUE system and by a method which is complementary to, and conformal with the scientific method (p. 4, emphasis theirs)."

Unfortunately, many scientists in this country and more dramatically in Germany during the Hitlerzeit, have followed this algorithm faithfully with monstrously dystopian consequences for mankind.

Thus, erstwhile "value-free" scientists daily engage in highly normative professional behavior and are confronted with a classic problem in cognitive dissonance--all too frequently resolved by compartmentalization, repression, the Gurkha stance, or what Boring (1964) appropriately labeled "a preference for certain kinds of ignorance."[6]

Frequently these decisions, actions and designs have profound implications and consequences for human affairs at all levels far beyond those envisioned by the orginators of the system--unanticipated secondary consequences (Tooley, 1974). These implications have been spelled out in detail in particular reference to computer-based systems in Boguslaw's (1965) work, The New Utopians--A Study of System Design and Social Change

> The point, of course, is a simple one. In the sociology, the tasks set for these computerized equipment systems prescribe behavior patterns within a social system. Any computer program or hardware complex that sets forth operational procedures is, in fact, specifying details of permissible social action. Behaviors not specified are more than illegal--they are not possible (p. 5).

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[6]Ernest Nagel (1962) reserves harsher words for this implicit philosophy and terms it a "malicious philosophy of science."

> On the other hand, every rational appraisal of values must take cognizance of the finds of the natural and social sciences; for if the existential conditions and consequences of the realization of values are not noted, acceptance of a scheme of values is a species of undisciplined romanticism (p. 638).

See also Alfred Adler's excellent article (1972) "Science and Evil," arguing that science is our best weapon against moral decay.

The dilemma--and subsequent embarrassment--lies in the fact that existing models of science constructed upon the familiar wertfrei, descriptive-predictive paradigm fail to provide an adequate basis for the rational, axiological analysis of prescriptive decisions and actions. Reconciliation of this major metascientific problem requires minimally:

> Radical reconstruction of the metathoretical-philosophical base of scientific actions, specifically integrating the normative component of science with the theoretical and empirical components (Marney & Smith, 1961; Pratt & Tooley, 1967d, 1968; Tooley & Pratt, 1964; Tooley, 1965).[7]
>
> The development of systematic, empirically based scientific axiologies (Becker & McClintock, 1967; Churchman, 1964; Hartman, 1967; Rapoport, 1953; Weinberg, 1970) as well as praxiologies (Kotarbinski, 1965) for the sciences generally, and the prescriptive-operational disciplines in particular (Aschenbrenner, 1972).

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[7]Nicholas Smith and Milton Marney are presently engaged in this important metatheoretical reconstruction which is to appear in book-form entitled, Foundations of the Prescriptive Sciences:

> Under the concept "prescriptive science" we address the domain of professionally recommended decisions in general, with major emphasis on methodological issues. Problems of professional practice in the management sciences represent our initial concern, but it is evident that a coalescence with medical-psychiatric, legal-ethical, economic and general scientific-advisory practices must be accommodated by any thoroughly persuasive philosophical reconstruction that aims at the explication of a legitimate normative mode of rational analysis for professional practice (Marney, 1968).

> The construction of an alternative paradigm to replace the wertfrei concept of scientific objectivity.

For the remainder of this chapter we shall be concerned principally with the latter task. After a brief epistemological and historical analysis of the prevailing notion of "scientific objectivity," we shall articulate an alternative paradigm, axiological specification--a general systems approach to the problem (Pratt & Tooley, 1967d; Tooley & Pratt, 1964; Tooley, 1965).

Scientific Objectivity as an Historical Paradigm

Historically the behavioral and social sciences have inherited (or according to some "expropriated") a model of science from the "physical" and "natural" sciences of the nineteenth century. This model was in large part the product of an era characterized by radical positivism, the enthronement of unbounded rationality and an overevaluation of the physical sciences due principally to the spectacular successes of Newtonian mechanics.[8] Leading spokesmen for this model were the physicist, Ernst Mach (1907) and his disciple,

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[8]This overestimation of the "hard" sciences, the abuse of their models (London, 1944, 1949) and subsequent "physics-envy" on the part of the social and behavior scientists has even drawn criticism from such eminent physicists as Max Born (1964), Robert Oppenheimer (1956), Erwin Schrodinger (1956) and Weizacker (1952). In Oppenheimer's words:

> Physics has a special meaning for the word "classic;" classic means wrong, it means a wrong view that was held to be right a little while ago)p. 130)...it seems to me that the worst of all possible misunderstandings would be that psychology be influenced to model itself after a physics which is not there any more, which has been quite outdated (1956, p. 134).

Karl Pearson (1911). Mach, in fact, was such an ardent and articulate spokesman that the view came to be known as Machian positivism (Blackmore, 1972; Schrödinger, 1956). From the philosophical-epistemological view of Machian positivism, "scientific objectivity" was to be achieved by assiduously adhering to the criteria implicit in the following cherished and unquestioned epistemological assumptions:

1. The doctrine of Wertfreiheit which holds that science is by definition neutral in regard to values and values per se are anathema in scientific inquiry.

2. The doctrine of Observability which states that data are admissible as scientific evidence to the extent they are directly observable.

3. The doctrine of Objectivation which lays claim to the existence of an objectified world standing completely independent of the cognizing "subject"[9] and its derivative corollary, "the principle of least interference."

This model of science and derivative conception of "scientific objectivity" has atavistically manifested itself in this century as logical positivism and in some forms of behaviorism and operationism

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[9]The dichotomous nature of this epistemological assumption and the corresponding subject-object morphology of the English language makes almost any discussion of the "topic" (I deliberately refrain from using the word, "subject") take on an Alice-in-Wonderland quality:

> A look at the meanings of observer, observing, and the observed (as the object of observation), leads one to the interesting etymology, epistemology and kinds of meanings object, objective, objectivism, etc. Meanings that are not only semantically varied, but at variance with each other, having referents that run the gamut from near identities, to mutually exclusive, to diametrically opposite (Dewey, 1955). As Alice asked, 'The question is whether you can make words mean so many different things.' To which Humpty-Dumpty replied, 'When I use a word, it means just what I choose it to mean neither more or less.' (Pratt & Tooley, 1967a, Pp. 166-167).

and has since dominated thought and action in the social sciences to the present time. This in spite of the fact that radical positivism's progenitor, physics, abandoned the model long ago as obsolescent in the light of such empirical evidence as Heisenberg's (1958, 1971) principle of uncertainty and its implications of the inescapable effects of the observer upon certain observed systems and Bohr's formulation of complementarity demonstrating the effects of the observer's theoretical frame-of-reference upon data collected (Heisenberg, 1971).

In a well-documented critique of a number of positivism's assumptions (including the doctrine of observability) von Mises (1949) agrues that:

> Only in recent years have (physicists) begun to see the limits of their endeavors and abandoning the excessive pretensions of older physicists, discovered the "uncertainty principle." They realize today that there are unobservables whose unobservability is a matter of epistemological principle (p. 57).

Attacking the doctrine of observability from within, Schrödinger (1956), the Nobel prize-winning physicist, charges that radical positivists in physics:

> ...believe they have in Mach's principle (i.e. observability) found a wonderful way out of this dilemma which frees us from the obligation to search for clear conceptions of Nature by condemning the belief in them as gross superstition.... Why should we here be allowed to take recourse to an epistemological principle as an excuse for our failures (Pp. 196-197)?

In regard to the doctrine of <u>objectivation</u>, Schrödinger is

equally critical:

> Objectivation: By this we mean what is also called the hypothesis of a real world around us. It is not trival that we are dealing here, as I maintain, with an at first unconscious and incomplete simplification of the problem of nature by preliminary exclusion of the cognizing subject from the complex of what is to be understood. The fact that objectivation amounts to the retreat of one's own person into the role of an onlooker who himself does not belong in the picture, is veiled by the following two consecutive circumstances. First of all, my body, to which my mental life proves to be so directly attached, is part of the object, the real external world which I construct. Secondly, the same holds true for the bodies of other people. if it appears natural to include one's own sphere of consciousness in the real world, this holds even more so for the spheres of consciousness attached to other bodies, those usually being hypostatized as essentially different from one's own consciousness. This inclusion is based on the circumstance that those foreign spheres of consciousness are sufficiently attested to as to exclude for me any doubt in their reality; on the other hand, they are to me personally completely and utterly inaccessible. Hence, one concludes, they must be objective, i.e., one includes them in the object, the real world. Since, one argues further, they are different from one another and from one's own not in kind, but only in individuality, anything that holds for them must also hold for one's own consciousness.
>
> It is this chain of false conclusions from which the main antinomies arise, the amazement that the objective world-picture is 'colorless, cold, and silent,' the vain search for the point where 'spirit moves matter,' etc. (1956, Pp. 183-184).

Oppenheimer (1956) in reference to epistemological impossibility of objectifying the world refers to "...the subtle relation of what is seen to how it is seen.... The inseparability of what we are studying and the means that are used to study it, the organic

connection of the object with the observer (p. 134). And David Bakan (1953)--experimental psychologist and part-time epistemologist in a different field (i.e. learning theory) and from a different theoretical perspective--reached essentially the same conclusions:

> The "methodological" distinction between scientist and subject prevents us from seeing that the psychological processes of the experimenter are an integral part of the nature of the experimental situation (Pp. 47-48).

The work of Robert Rosenthal (1967, 1969), Orne (1962), Sarason (1951), McGuigan (1963), and Barber (1972) and others in the social psychology of psychological research is contributing significantly to the weight of experimental data substantiating the many qualitative and quantitative ways in which the experimenter confounds his own experimental design by serving as an unaccounted for source of variance (Epstein, Suedfield & Silverstein, 1973; Schutz, 1969).[10]

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[10]After an extensive review of this problem in relation to methods of organizational research, Louis Barnes (1967) reached essentially the same conclusions:

> Even though, as Bridgman says, the experimenter cannot get away from himself, he can at least reformulate his role so as to take into account the problem of his own involvement. He must find ways to treat himself as a variable rather than eulogize his role as a detached controller of other variables. He also needs to explore further the possibilities for altering environmental and subject variables beyond the limits of those assumed by classical design requirements. In short, as McGuigan (1963), Tooley and Pratt (1964), and Klintz, et al. (1965) suggest, it seems time to review and broaden our notions of experimental design (Pp. 89-90).

Wertfreiheit, as a scientific given, has come under increasing attack from all sides (Brooks, 1973). The logical and empirical impossibility of a value-free science has been argued by Köhler (1938) in psychology; the biologist Waddington (1941); the physicist Bronowski (1956); and Herrick (1949), the famous neurologist; as well as a large number of sociologists including Myrdal (1944), Horowitz (1963), Mills (1959), Gouldner (1964), Mannheim (1936) and Lynd (1939).[11] Some psychologists have been notably vocal in acknowledging the inescapable presence of values, choices and

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[11] Typical of the steaming argument on the topic boiling between sociologists over the years was an exchange in 1937 between E.E. Eubank and H. W. Odum in articles by each entitled "Errors of Sociology":

> Let us, at the risk of seeming dogmatism, dismiss in a few words this first and most grievous error which still haunts the writings of the pseudo-sociologists.... Sociology itself...passes no moral judgment and sets up no ethical standards for human conduct. It neither approves nor condemns specific policies nor programs of action as such, but simply describes, analyzes, and declares relationships of cause and effect, and leaves the question of what ought to be, to be settled in specific instances by those who are dealing with the moralistic and evaluative aspect of particular social problems (Eubank, 1937, p. 180).

Odum, then editor of Social Forces which published the exchange, retorted with his antithesis:

> Another premise of error appears in the failure of sociology to include social values as one of its major areas of study and research.... This conclusion...is reflected in the extraordinary deficiency in social standards and objectives which the sociologists can make available for both theory and programs of social planning at the present time....

Judging from the current literature it appears that we have progressed little beyond the situation Odum described in 1937. See in particular the following texts: Bierstedt (1959), Goode and Hatt (1952), Gouldner (1970), Lundberg, Schrag and Larsen (1958).

valuations in scientific inquiry and professional practice (e.g. Korner, 1956; Lowe, 1959; Newbury, 1958; Van Kaam, 1958; Winthrop, 1959).[12] The comments of Brewster Smith (1954) summarize their views:

> ...The psychologist cannot stop making choices, as scientist, teacher, therapist, or human engineer. The choices may be witting or unwitting, responsible or irresponsible, but they are made and they entail consequences...the claim to a value-free science...only obscures the value elements in the choice of the problem, of research setting, of conceptual framework, in the decision to rest with negative findings, when results are reportable, and so on endlessly. Only if we know what we are choosing, only if the values involved in our choices are explicit, do our decisions become responsible ones (p. 515).

Also recognizing the imperative need to make implicit values, assumptions, and valuations explicit, Gunner Myrdal (1944) in his profound metatheoretical coda to The American Dilemma asserted:

> Valuations are present in our problems even if we pretent to expel them. The attempt to eradicate biases by trying to keep out the valuations themselves is a hopeless and misdirected venture.... There is no other device for excluding biases in the social sciences than to face the valuations and to introduce them as explicitly stated, specific, and sufficiently concretized value premises (Pp. 1943-1944).

As Myrdal implies, scientists for years have frantically but unsuccessfully attempted to achieve "absolute" objectivity and eliminate "personal bias" by eradicating wherever possible all sources of experimenter influence. Historically this method of

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[12] In the past ten years there has been an accelerating growth of an interest group focusing on the role of human values in psychology known as "The Third Force" or "Humanistic Psychology" (cf: Bugental, 1965, 1967; Maslow, 1958; May, 1967; Pratt & Tooley, 1968).

controlling bias through the abortive effort to extirpate all sources of experimenter influence originated largely with Francis Bacon. According to Karl Popper (1963), Bacon was the creator and the new secular science's leading acolyte in propounding what Nietsche once facetiously referred to as the "dogma of immaculate perception." In Popper's words Bacon's scientific dogma demanded:

> We must purge our minds of all prejudices, of all preconceived ideas, of all theories, superstitions, or "idols," which religion, philosophy, education, or tradition may have imparted to us.... If our minds are pure, we shall be able to read the Book of Nature without distorting it: we have only to open our eyes, to observe things patiently, and to write down our observations carefully, without distorting them--and the nature or essence of the thing observed will reveal itself to us (p. 962).

Skipping a hundred years or so, in the latter part of the 18th century, the beginning of a long series of negative cases for the "dogma of immaculate perception" commenced when the astronomer Maskelyne unhappily found that the observations of one of his assistants consistently differed from his own. Assuming an objectified, observable universe, Maskelyne summarily canned the hapless assistant. In a few more years another astronomer, Bessel, found that individual differences within and between astronomers' observations were commonplace (Heidbreder, 1933). Thus in one historic event, the "psychology of individual differences" and the "personal equation" were born, and a precursory death knell for

the doctrines of radical objectivation and absolute observability sounded. Since that time scientists, striving for an impossible type of objectivity, have made every conceivable attempt to "include the observer out" of the observed system (Bakan, 1962; Stevens, 1936; Wundt, 1904)--but he always keeps slipping in the backdoor, even in 20th century quantum mechanics.[13] As Werner Heisenberg (1958) indicates:

> In quantum theory, man as the object of science is brought in through the questions which we put to nature in the a priori terms of human science (p. 106).

Thus, we come full circle: disenchantment, criticism and solid evidence to the contrary abound, yet the classic model of "scientific objectivity" persists like a Jungian archetype. If the Zeitgeist--that is, the Scientific Establishment--is prepared, it is surely time for open competition between alternative paradigms. Several years ago my Kansas colleague, Gardner Murphy (1958), said: "Most limitations of individual and cultural inventiveness lie in assumptions:

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[13]As you might expect, existentialists have long recognized this phenomenon. As Sartre cryptically put it in Saint Genet: "Action, whatever it be, modifies that which is in the name of that which is not yet."

More recently a handful of behaviorally oriented psychologists and philosophers have begun to construct a phenomenological explanation of reinforcement contingency valence and attributed reinforcement potential and their role in the experimental contract (Tooley, 1974).

if you challenge the assumptions, there is a new dimension (p. 250)." Having challenged the underlying assumptions of classical "scientific objectivity," let us now explore the possibility of a new dimension.

Axiological Specification: A New Paradigm

This alternate paradigm represents a radical departure from the epistemological assumptions (i.e. observability, objectification, Wertfreiheit) underpinning the classic concept of "scientific objectivity." In particular it calls for a reconceptualization of the stereotyped outside-looking-in, detached role of the observer. From this new point of view, every observer is a participant-observer and therefore constitutes another source of variance to be accounted for along with other sources within the transactional system. In certain experimental systems--depending upon the purposes of the particular study--it might be desirable to minimize the investigator's participation (influence) in the system by programming his participation in a highly structured fashion. In other participant-observer situations particularly those involving prescriptive operations (e.g. psychotherapy, social design, education, change induction, action research, etc.) the purpose might be to influence the system under investigation as much as possible, but still accounting for (though now exploiting) the variance within the system attributable to the

change-agent's participant-observation. The question becomes then, not how to eliminate the "bias" (unaccounted-for-variance) of participant-observation, but how to optimally exploit and account for the relevant variables in terms of the purposes of the research (Pratt & Tooley, 1967d; Tooley & Pratt, 1964).

From the ultimate standpoint of axiological specification, authentic scientific objectivity is defined as the extent to which every source of variance within a given transactional system is accounted for--specifically including the investigator as a contributing participant. As Rosenthal (1964) has pointed out, whether or not we can pin down all the sources of variance in a complex transactional system may be a philosophical question, but it is an empirical question for scientists to account for increasing proportions of variance in research due to experimenter variables (Epstein, Suedfeld & Silverstein, 1973). Yet with the rapid development of real-time science (Sackman, 1967), it may well be what were philosophical problems a few years ago, may turn out to be empirical, experimental problems in the future.

Inherent in this definition is the assumption that authentic objectivity is a measurement of a representation of reality along many dimensions. Put in a slightly different way, it is an assessment of the adequacy of a given model (implicit or explicit)

in reflecting all the sources of variance within a real system--including reflexively the participant-observer or the model-maker himself.[14] The assessment of this "goodness-of-fit" between representation of reality (the model) and the real system can proceed along both quantitative and qualitative dimensions.[15]

Quantitatively the assessment can proceed from the gathering of unorganized, or uncollocated data to highly sophisticated (and expensive) computer-based, real-time systems. Such a taxonomy[16] of these levels could be categorized in this manner:

> Uncollocated Data: This basic level involves the collection of unorganized data--data which has been collected randomly or "as available" and not been placed in the taxonomic categories of a theoretical construction. This level was essentially the "ideal type" that Frances Bacon strived for in scientific data collection (Popper, 1963). While

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[14]This is a classic problem in reflexivity; elsewhere it has treated at some length in relation to Gödel's theorem. Readers interested in such metatheoretical quandries are referred to: "Who watches the brainwatchers?" (Tooley & Pratt, 1964), and "Action Psychology" (Pratt & Tooley, 1967d).

[15]Not to mention political lines--a discussion beyond the purpose of this chapter but, needless to say of critical importance. Those interested should read Scheff's (1968) article: "Negotiating reality."

[16]Or, more accurately, a metataxonomy. Special acknowledgement is due to Dr. Walter Sedelow, Professor of Sociology at the University of Kansas who first started my concerned thought about the differentiation between these levels of information gathering and utilization.

oversold and misused, it may well yet come into its own, however, as increasingly sophisticated "pattern recogition" computer programs are developed.

Taxonomic Data: This level perhaps represents the first level of rationally designed theoretical construction. It can range from a simple binary, nominal system to differentiate information from two classes of events to the elaborate, highly comprehensive taxonomies, found in zoology and botany. Until the rise of so-called "dynamic" psychiatry in the early 1920's in this country, psychiatry was fixated at this level and was known as "descriptive" psychiatry.[17]

Systems Structure Analysis: This typically involves the identification of all the subsystems within the target system and the isolation of the component elements, relationships and transactions within and between the subsystems. This type of analysis usually generates its own taxonomy within which data is to be ordered. Social Systems Accounting is on the Grenze here; some of its procedures such as the identification of social indicators falls into this category, but other procedures such as measuring changes in system structure over time overlaps with the following category, System Performance Analysis (Tooley, 1971c). Gross (1966) has indicated this is due to the nature of most complex systems: structure and performance are usually so intricately connected in fact, that separating them rationally for analytic purposes is done with some cost.

Systems Performance Analysis: In general follows one of two basic forms: (1) input-output analysis, and (2) assessment of system performance in terms of progress toward the stated objectives of the system (Tyler's Model). Specific techniques include cost-benefit analysis, modeling and simulation, linear programming, gaming, and much of operations research (Churchman, 1972).

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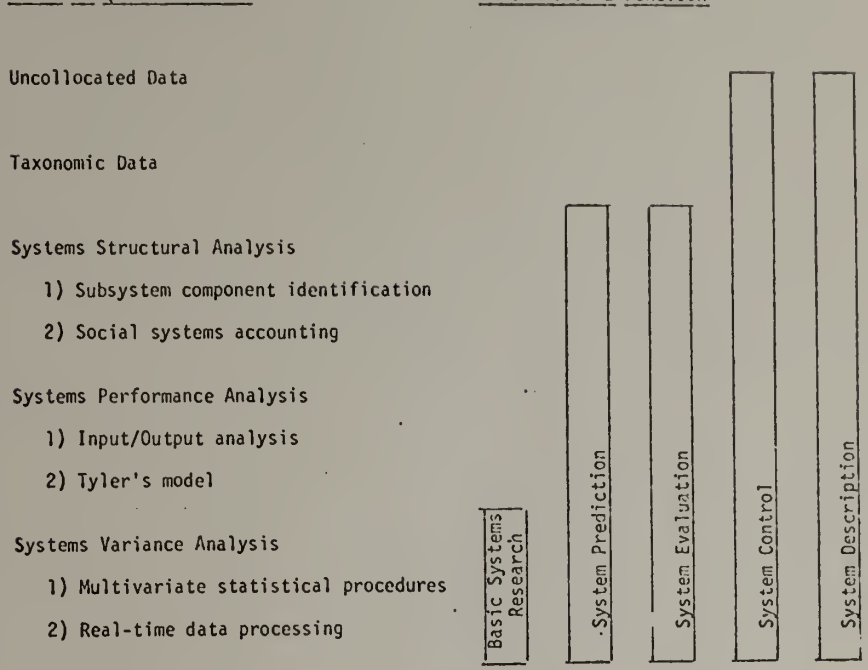
[17]"Descriptive psychiatry," once an illustrious school associated with such famous figures as Krapelin and Bleuler, is now a Schimpftwort in most psychiatric circles.



Level of Quantification and Corresponding Informational Function

Figure 1

> Systems Variance Analysis: The goal here is to not only isolate the subsystems and components, but to systematically track down the sources of variance accounted for by each. In the past, this level of accounting was limited largely to bivariate, "independent-dependent" variable designs, and consequently applied for the most part to very small systems involving what Warren Weaver (1948) called "problems of simplicity." Now with rapidly developing multivariate techniques (e.g. factor analysis, analysis of covariance, cluster analysis, etc.) and the computational machinery to perform complex intercorrelations with large matrices, huge strides are being made on problems of "organized complexity"--problems typically involving 20 to 250 interdependent variables (Struening, 1974).

Furthermore, the development of "real time" science threatens to further revolutionize what is generally accepted as "scientific method" in both the "bivariate" and "correlational" forms (Cronbach, 1957); as Sackman (1967) hints:

> I believe we have been going about our scientific business in reverse with respect to events in time. Science should be built around real time events as they occur in object systems, rather than force events to fit into temporally invariant scientific molds. We should consider trading in at least some of our platonic models for more down-to-earth real time models (p. 224).

Thus by focusing on various qualitative characteristics of the transactional field, combined with the possible levels of quantitative analysis, a wide range of "objectivities" are available. Ends-means criteria for the selected type of objectivity can then be specified in terms of the purposes and methodologies of the agent: e.g. description prediction, or control; social design; change-induction; program evaluation. The key point here is the specification of all criteria--whether implicit or explicit.

In the case of the prescriptive disciplines, the quantitative levels of accounting most frequently employed are Systems Structural Analysis and Systems Performance Analysis. In the problems encountered at this level of scientific activity it is mostly impossible to achieve the level of control inherent in Systems Variance Analysis--nor is it necessarily desirable (Popper, 1963). At the level of professional-scientific practice encountered in systems analysis and design; psychotherapy and behavioral engineering; as well as education, perhaps the most important type of objectivity available is expressed in the principle of axiological specification which states that:

> Every scientist-professional is responsible for identifying and explicitly specifying the axiological assumptions which underpin his scientific-professional decisions and actions and wherever possible accounting for their possible effects upon the outcome of his activity.

At the quantitative level of Systems Variance Analysis this would require incorporating the axiological assumptions of the investigator into the design as specific experimental variables. At the operational or prescriptive level of practice, it means the public statement (particularly to the client) of whatever axiological assumptions of the practitioner which may effect his professional activity.[18]

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[18]In other places it has been indicated how the ethical base for this type of professional practice (e.g. psychotherapy, behavior modification, surgery, etc.) must be essentially contractual and explicit in nature (London, 1969; Pratt & Tooley, 1966a, 1966b).

For example, if a Catholic physician decides not to prescribe an oral contraceptive on moral grounds rather than medical, that decision and the axiological base of that decision should be made explicit to his patient so that she may guide her future actions accordingly. Daily in the practice of psychotherapy, behavior modification, and systems design, analogous axiological decisions are made--wittingly or unwittingly--with consequences for human values and life which frequently extend beyond the immediate situation (London, 1969). By better informing all participants about the basis of decision and possible future consequences, axiological specification would thus serve as an important social control among those individuals and interest groups whose prescriptive decisions determine "what should be" (Cattell, 1973).

Beyond the immediate purpose of establishing a workable axiological base for the prescriptive sciences, an additional heuristic advantage of axiological specification is the encouragement of novel assumptions. By specifying our basic assumptions it bares postulational inadequacies and affords the opportunity to break free from the traditional frames of reference conditioned and reinforced by disciplinary molds and the scientific establishment. It is commonly believed that scientific revolutions occur by so-called "breakthroughs" or empirical discovery. As the history

of science and the logic of discovery show, however, new systems of thought and genuine revolutions are more often born of novel assumptions. The historical works of Kuhn (1962), L. K. Frank (1957) and Boring (1929) dramatically indicate that many if not significant advances in science occur with radical shifts from basic assumptions (Kuhn, 1974). Non-euclidean geometry was born when Lobachevsky questioned Euclid's basic assumptions. The heliocentric system developed when Copernicus departed from the Ptolemaic system and the pioneering work of Einstein proceeded with a radical departure from Newton's basic assumptions. The history of science is replete with similar "Copernican revolutions" all occurring with the invention of novel sets of assumptions or paradigms.

The following issues, then, were raised and discussed in this chapter:

The role of scientific inquiry in social change-agentry.

The particular importance of values in the so-called prescriptive sciences and disciplines.

The logical and historical inadequacy of the Machian model of scientific objectivity.

The nature and process of axiological specification as an alternative concept.

The importance of new paradigms in advancing science and civilization.

CHAPTER IV

HUMAN SYSTEMS ACTUALIZATION: AN ALTERNATIVE TO THE MEDICAL MODEL

Along with traditional values of freedom, equality, respect for human dignity, and democratic participation; the value of human excellence in American social and political philosophy has been reiterated and enlarged by Gardner in his works, Self-Renewal: The Individual and the Innovative Society (1964) and Excellence: Can We Be Equal and Excellent Too? (1961). This basic human value was politically reaffirmed through federal legislation giving birth to the Office of Economic Opportunity and related legislation including those acts concerning Civil Rights, the establishment of Comprehensive Community Mental Health Centers and various urban renewal projects in the 1960's. These legislative acts were primarily attempts to mitigate a number of deactualizing consequences of the existing societal contract, but not to fundamentally modify that contract (Miller & Rein, 1965; Moynihan, 1969; Pratt & Tooley, 1966a). The espoused legislative intent was to: (1) politically, socially and economically re-enfranchise the rights and obligations of those citizens handicapped by the societal contract which denied (and continues to do so) large segments of the population access to the opportunities available in a democratic and affluent but inflationary society

(Cahn, 1961; Galbraith, 1958; Harrington, 1962; Potter, 1954) and, (2) develop broad intervention programs directed toward establishing and maintaining levels of human functioning among those segments of the population (including individuals, families and communities) who "have not" achieved the minimal standards of the American society (Cantril, 1965; Inkeles, 1965; Pratt & Tooley, 1966a; Rae-Grant, Gladwin & Bower, 1966; Tooley, Zimmerman & Pratt, 1966). The resulting programs, their derivative strategies of intervention, and the social institutions developed to achieve these goals, were plagued by such hangups as:

1. Frequently of questionable effectiveness
2. Have been assigned inadequate priorities
3. Are often off-target
4. Inappropriately conceptualized and taxonomized
5. Occasionally exacerbate the very conditions they were ostensibly designed to ameliorate
6. Generate unanticipated, second order problems in the process (Andreas, 1963; Pilisuk, 1974; Rossi & Williams, 1972; Tooley, 1972b).

Nevertheless, the programs were important manifestations of the fact that at least segments of the American public and its government recognized that certain sociopsychological problems and the deactualizing conditions that maintain them constitute major hangups in actualizing the entire society and furthering social

progress along the utopian continuum.[1]

This recognition of the pressing need for human systems actualization at all levels of organization has important political implications for the social-behavioral sciences (Tooley, 1972b). The public, political recognition of these problems as legitimate and pressing social concerns constitutes a new mandate for members of the social-behavioral sciences: the evocation, maintenance and generalization of effective human functioning (Korten, Cook & Lacey, 1970). This mandate has been publicly acknowledged by a number of leading professional spokesmen:

> It is my estimate that society is caught up in a gigantic tide of rising expectations and that this cultural phenomena is not limited to the underdeveloped countries or to the civil rights movement. Indeed it is a pervasive imperative that has found expression in many of the elements of the "Great Society." I think it no accident--not sheer political design--that these rising expectations were articulated by two of our foremost political leaders of recent times and that they focus upon programs devoted in their essence to effective human functioning in both a broad and narrow sense (Brayfield, 1965, p. 647).
>
> The character of a science and a profession is determined largely, I surmise, by great ideas from within the profession itself, generated by researchers and scholars, and by great social movements generated outside the science and profession entirely. For example, the direction of development of the physical sciences in America today is being profoundly influenced by the decision to put man on the moon. The direction of development of the social and behavioral sciences in America today will be profoundly

[1]It appears, however, at the present time that the actualization of human systems and society is not a priority at the societal level and many human service professionals are "waiting out" the current administration (Leopold, 1973; Tooley, 1971a, 1974).

> influenced by a national decision of comparable scope: to make it possible for every citizen to develop his potential to the fullest. This decision, this momentous commitment to human development, will be the major determinant of the character of psychology in the next decade or so, provided that we are a responsive and responsible profession prepared to pick up socially significant options (Hobbs, 1966, Pp. 1-2).[2]

Competence as a Model of Human Functioning

It is no coincidence that a growing number of social and behavioral scientists are shifting from psychopathological, medical and other person-blame-causal-attribution models, to models of competence, effectiveness and human actualization (Albee, 1973; Caplan & Nelson, 1973; Leopold, 1973; Tooley, 1971a, 1974). In addition to longtime advocates such as Phillips and Ziegler (1961), Foote and Cottrell (1954), Gardner Murphy (1958), and Brewster Smith (1965, 1973), Hunt (1967, 1974) and Peterson (1968). The influence of the social-political-professional Zeitgeist plus increasing experimental evidence substantiating the relevance and utility of the model are proving to be substantial determinants of many psychologists' professional and scientific behavior. Let us examine a small part of the accumulating data which supports the competence model.

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[2]This optimism of the sixties was rapidly turned to disenchantment in the seventies (Moynihan, 1969; Tooley, 1971a, 1974). See for example Pilisuk's (1974) new book, How We Lost the War on Poverty; also Horowitz's latest, The Use and Abuse of Social Science (1974).

Robert White (1959) makes the concept of competence central to his theory of motivation, personality development and human actualization-underactualization. According to White, the pleasant reinforcing experience of efficacy, of successfully dealing with the environment and effecting consequences, begins in early infancy and establishes an intrinsic motivation foundation which is relatively independent of external reinforcement.[3] Effective action and its consequences in terms of environmental mastery are essential to the adequate development of all humans. Conversely, the development of ineffective patterns of environmental transactions is characteristic of many forms of psychosocial disorder including so-called "schizophrenic" behavior. Analyzing the contingent relationships between competence, human actions and their consequences, White (1965) points out that:

> It is clear that interpersonal competence, just like competence in dealing with inanimate objects, is built up through actions and their consequences. We learn through experiences what effects we can have on others and what effects they are likely to have on us.... In such ways occurs the growth of interpersonal competence,

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[3]White's emphasis on the role of effective action and play in human behavior is highly similar to the formulations of Woodworth (1958) who, after more than a half century of research with humans and lower organisms, concluded that efficacy in exploring and dealing with the environment are primary motives. Similarly Premack's (1965) research has reflected the reinforcing properties of the opportunity to explore and manipulate the environment. All of which was insightfully observed and more elegantly phrased over seven centuries ago by the poet, Dante: "...every doer, in so far as he does, takes delight in doing; since everything that is desires its own being, and since in action the being of the doer is somehow intensified, delight necessarily follows...."(Arendt, 1958, p. 175).

> and it is always a question of actions put forth, of attempts to exert an influence, and of discovering the consequences of those attempts (p. 201).

From a seemingly radically different approach to human behavior, Skinner (1938, 1953, 1959, 1971) reached strikingly similar conclusions arguing that the relationships between contingencies, consequences and effective behavior are central to the analysis of human behavior and social systems:

> Men act upon the world, and change it, and are changed in turn by consequences of their action. Certain processes, which the human organism shares with other species, alter behavior so that it achieves a safer and more useful interchange with a particular environment. When appropriate behavior has been established its consequences work through similar processes to keep it in force. If by chance the environment changes, old forms of behavior disappear, while new consequences build new forms (Skinner, 1966, p. 161).

In 1966, Lefcourt completed a review of related research concerning the "internal versus external control of reinforcement." This personality construct, based largely on Rotter's (1954, 1966) social learning theory, refers to the degree to which individuals see themselves as being responsible for, and in control of their own behavior and at the other end of the continuum, the degree to which they perceived (attribute) their behavior as being the result of external control imposed upon them (Tooley, 1966a, 1974). Like White and Skinner, as well as Adler (Ansbacher & Ansbacher, 1956) and Mowrer (Mowrer & Viek, 1948) before them, this theoretical position stresses the instrumental and motivational aspect of effective behavior, control and particularly the question

of the contingencies between behavioral acts and their consequences--even more emphasized by a colleague, Fred Finch (1974).

The effects of early infancy and childhood experience upon levels of competence has been an underexplored field of research but is receiving increased attention (Bowlby, 1966; Frank, 1966). The early work of Moore (1963) in teaching toddlers to read, write and type through autotelic activities, Suzuki (1966) in developing high levels of musical competence (Pronko, 1967) and Asher's (1964) unique strategy of the "total physical response" for developing precocious levels of linguistic abilities, all indicate the long over-looked learning potential of pre-school children. Even at the neonate level the human capacity to learn is being demonstrated as in the research of Watson (1967) who has shown how infants in the first weeks of life learn to operate on their environment and acquire what he terms "contingency awareness." Other research at this level by Held (1966) demonstrates ways in which the development of visual attention and grasping responses of infants can be greatly enhanced by enriching and increasing the stimulation available in the infant's transactional-field.

In 1965 a special committee of the Social Science Research Council (Smith, 1965) on socialization and social structure convened to discuss research and social action possibilities aimed at the

broad-range development of human effectiveness from the neonatal level through the evocation of competence in developing countries--including the U.S. From the outset of the conferences it was apparent that two, seemingly disparate, approaches were advocated. The first approach, exemplified by the previously discussed work of White, emphasizes the agent-role of the individual's own effective actions and subsequent "intrinsic" satisfactions one derives from dealing effectively with environment. This idiographic strategy sees external reinforcement as a "stultifying" influence which leads to undue dependency upon external incentives in the social system.

An alternate strategy attacks the problem at a higher level of organization--that of the would-be socializers and the social systems within which behavior develops. Inkele's (1965) position is typical of this theoretical orientation. From Inkele's point of view competence must be defined socially. His model of social competence involves the achievement of three sets of "statuses": (1) basic minimal statuses which society expects or assigns to individuals, (2) statuses to which one may aspire within the contingencies afforded by the given social system, and (3) those statuses which one may create or invent for oneself (Smith, 1965).[4]

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[4]The concept of status refers to a social position to which adheres specified prerogatives; as is the concept of role, status is invariably defined through personal, organizational, or social contract-systems.

Brewster Smith (1965) has attempted to reconcile these divergent approaches:

> The conception of competence with which each works is hewn to fit his own divergent theoretical purposes. Yet discussion showed that there is no essential clash between the two points of view. The problem, rather, is how to make them meet: how to formulate and understand the interplay between processes of the kind described by White in the social contexts and with which Inkeles is concerned. There would seem to be no "right end" from which to attack this problem (p. 18).

The apparent conflict between these two different approaches is reflected in Smith's use of the term interplay. The two orientations can be reconciled by viewing the problem from the transactional-field and levels-of-organization perspective as discussed in earlier chapters (Caplan & Nelson, 1973). From this point of view, effective behavior is seen not only as a function of the "intrinsic" characteristics of either the individual or the social system, but also of the reciprocally modifying contractual transactions which occur between them. The same transactional relationship obtains at the opposite end of the effectiveness continuum--the realm of psychosocial inability or disorder (Hunt, 1974; Tooley, 1971b). In short, the functional and structural inadequacies of a society and its constituent levels of social systems contribute to dysfunctional or ineffective individual behavior, which in turn contributes to the further dysfunction and disorganization of the constituent

social systems and ultimately, society.[5]

Contract Systems Theory of Human Systems Actualization: In the history of the modern western world the societal contracts of most countries establish minimal standards of human effectiveness demanding that the individual (1) become sufficiently autonomous to prevent undue dependence of "drain" upon the social system and (2) "adjust" and accommodate passively to the expectancies and demands (stresses) of the social system (Cantril, 1965). Reflecting the spirit of this minimal concept of human effectiveness, J.L. Moreno once commented that,"if a man can get along on the outside he is mentally healthy." While this minimal adjustment model may still be more or less modal for most of the world, it would appear that the Zeitgeist is ready to tolerate a more ambitious conception of human functioning.[6]

The contract system theory of human systems actualization is based upon the optimal development of every individual and each social system's capacity to engage the personal problems and social issues of the times and through creative struggle, to

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[5]Works explicitly concerned with doing justice to the complexities of the transactional interplay between the individual and his social systems include: Personality and Social Systems (Smelser & Smelser, 1963), Toward a General Theory of Action (Parsons & Shils, 1951), Society and Personality (Shibutani, 1961), Sanford's (1967) Self and Society, Peterson's (1968) text in the field of clinical psychology and more recently Spiegal's book, Transactions.

[6]In the 1973-74 lecture series on human services, as a part of the Mental Health and Human Systems Design and Administration Program, virtually all distinguished lecturers called for broader, more relevant models than the medical model (Albee, 1973; Bell, 1974; Davis, 1973; Leopold, 1973; Rutledge, 1973; Spellman, 1974).

expand existing degrees-of-freedom for choice and action. The human systems actualization model emphasizes the concepts of "constructive conflict" (Churchman, 1964; Murphy, 1958; Toynbee, 1957) and dialectical "reconciliation" (Jourard & Overlade, 1966) as well as cooperation;[7] reliance upon individual and group self-control rather than external social controls; excellence rather than mediocrity (Gardner, 1961); coping and proactive behavior as well as reactive behavior (Allport, 1960; Bonner, 1965); change and innovation rather than maintenance of the status quo (Torrance, 1965); responsibility for conduct and consequences (Mowrer, 1967; Skinner, 1971); and the development of value systems and competencies which are personally and socially creative and are neither self-defeating nor destructive of the values or well-being of others (Aschenbrenner, 1972; Dubos, 1970; Pratt & Tooley, 1966a).

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[7]This emphasis is to distinguish our conception of human systems actualization from the narrower "bootstrap" concept of "self-actualization" as adduced by organismic-holistic psychologists (such as Goldstein (1940), Maslow (1962), and Rogers (1951) who reflect an auto-actional epistemology with the Rousseauean bias that man is intrinsically good and that if environmental factors keep out of the way the "inner potentialities of man," present from birth, will unfold like a blossoming flower. Our use of the term actualization reflects a situational-capability model (analogous to Wallace's (1966) response-capability notion) emphasizing the constructive uses of conflict and the transactional relationship between personal capabilities and social system contingencies both present and potential. The contractual-field approach is unfettered by auto-actional epistemologies and "angels-dancing-on-pinheads" assumptions about the intrinsic "goodness" or "badness" of man. It is congruent with Gardner Murphy's (1958) work on emergent human potentialities, and compatible with the aims and theories of the so-called "third force" or "humanistic psychology" movement as represented by May (1967), Bugental (1965, 1967), Severin (1965) and Allport (1960).

It is immediately necessary to clarify the distinction and relationships between our use of the term "actualization" and related concepts of "effectiveness" and "efficiency." The referents of the two latter terms are criteria for evaluating relative value of certain means, along two different axis. "Efficiency" refers to the differential costs of available means to achieve a given end, and typically employs cost criteria such as time, money, pain, manpower, or energy expenditure. "Effectiveness," on the other hand, is an evaluation of means along a different dimension, namely the "goodness of fit" between the outcomes of selected means and stated goals. Thus a given means can be highly efficient but totally ineffective and, conversely, an effective means might be quite inefficient. Judgments of both efficiency and effectiveness are essentially praxiological (Kotarbinski, 1965) in nature. That is, they are concerned with choices between available means; and they characteristically do not involved the explicit choice and evaluation of ends which is an axiological matter (Hartman, 1967; Urban, 1958).[8] This distinction between praxiological criteria

[8]The necessary distinction and relationship between axiological and praxiological problems often go unacknowledged by professional purveyors of efficiency and effectiveness. See, for example, a criticism of those social-behavioral scientists who accept as unquestioned givens the ends (values, objectives, goals) of the academic, industrial-military complex they serve; and then proceed to maximize the efficiency and effectiveness of client organizations under circumstances that may result in extensive deactualizing consequences for others (Praff & Tooley, 1968). In The Servants of Power: A History of the Use of Social Science in American Industry, Baritz (1960) has provided a penetrating account of this phenomenon.

of "efficiency" and "effectiveness" and axiological criteria of "actualization" is essential, for human beings and human organizations can develop and utilize highly effective and efficient courses of action which result in devastatingly deactualizing consequences (Wallace, 1974).

In contrast to praxiological criteria of "effectiveness" and "efficiency" which are means-oriented, our use of the concept of human actualization emphasizes the axiology of praxiological actions in that it denotes irreducible ends-means configurations. Furthermore these are ends-means directed at the open-ended realization of the positive potentialities of all human systems at all levels-of-organization; and finally, the "categorical imperatives," of reciprocity, equity and mutuality are stipulated as definitive criteria for actualization (Adams, 1965; Gouldner, 1960; Homans, 1961).

The dimension of reciprocity involves the evaluation of both ends and means according to the degree that the consequences of certain actions and values (means and ends) either benefit and enhance life and living for all concerned or serve to inhibit, constrain or even destroy the contractual rights of affected

parties.[9] Gouldner (1967) has called this axis the "norm of reciprocity."

> Specifically, I suggest that a norm of reciprocity, in its universal form, makes two interrelated, minimal demands: (1) people should help those who have helped them, and (2) people should not injure those who have helped them. Generically, the norm of reciprocity may be conceived of as a dimension to be found in all value systems and, in particular, as one among a number of "Principal Components" universally present in moral codes (p. 277).

In his book, Insight and Responsibility, Erikson's (1964) concluding chapter is "The Golden Rule in the Light of New Insight" in which he contrasts patterns of reciprocally actualizing relationships (between individuals and social groups) with counteractualizing or deactualizing relationships from the individual to the international level. Then, like Gouldner, he traces out, historically and transculturally, the entire reciprocity-mutuality continuum from the minimal demands of a basic reciprocity, through individual, family and group social

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[9]The failure by social scientists to attend to the reciprocal nature of human behavior and human problems has been forcefully addressed by Caplan and Nelson (1973) in their important article "On Being Useful: The Nature and Consequence of Psychological Research on Social Problems". Such failure leads to misconceptualization and frequently off-target intervention (Pratt & Tooley, 1966b) with devasting human consequences:

> Why does one kind of poverty concern us, and another does not? Why do we constantly study the poor rather than the nonpoor in order to understand the origins of poverty? Why do we study nonachievement among minority group members as undesirable behavior, but do not study exaggerated profit motive among "successful" businessmen as a form of deviance? Why do we study the use of marijuana as a "drug problem," but not federal government involvement in the drugging of "minimal brain dysfunction" (MBD) children in our grammar schools? Why is it illegal to be a "wetback" but not to hire one? (Caplan & Nelson, 1973, p. 207).

patterns of cooperation (economic, political, cultural) to the highest levels of creative mutuality involving "unconditional" personal, interpersonal, and social commitment.

Erikson uses the concept of reciprocity-mutuality in establishing an ethical Weltanschauung for his theory of social development for individuals and societies. His formulation of this concept at different contractual levels (involving a variety of contract-system spheres) is clearly illustrated in three passages:

> I would advocate a general orientation which has its center in whatever activity or activities gives man the feeling, as William James, put it, of being "most deeply and intensely active and alive." In this, so James promises, each one will find his "real me"; but, I would now add, he will also acquire the experience that truly worthwhile acts enhance a mutuality between the doer and the other--a mutuality which strengthens the doer even as it strengthens the other. Thus, the "doer" and "the other" are partners in one deed. Seen in the light of human development, this means that the doer is activiated in whatever strength is appropriate to his age, stage, and condition, even as he activated in the other the strength appropriate to his age, stage, and condition. Understood this way, the Rule would say that it is best to do to another what will strengthen you even as it will strengthen him that is, what will develop his best potentials even as it develops your own (p.233). Thus each growing individual's developing strength "dovetails" with the strengths of an increasing number of persons arranged about him in the formalized orders of family, school, community and society. But orders and rules are kept alive only by those "virtues" of which Shakespeare say (in what appears to me to be his passionate version of the Rule) that they, "shining upon others heat them and they retort that heat again to the first giver" (p. 232). Insofar as a

> nation thinks of itself as a collective individual, then, it may well learn to visualize its task as that of maintaining mutuality in international relations. For the only alternative to armed competition seems to be the effort to activate in the historical partner what will strengthen him in his historical development even as it strengthens the actor in his own development--toward a common future identity. Only thus can we find a common denominator in the rapid change of technology and history and transcend the dangerous imagery of victory and defeat, of subjugation and exploitation which is the heritage of a fragmented past (p. 242).

The contract systems theory of human systems actualization holds that individual behaviors as well as the collective actions of groups, organizations and societies must be evaluated along these dimensions of reciprocity and mutuality. It is not enough that actions be efficient and effective, for the social consequences of misguided efficiency and effectiveness are potentially devastating--as the history of man eloquently testifies (Smith, 1974).[10] The Gestapo, for example, was not only highly efficient, but deadly effective in implementing the genocidal goals of fascism;

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[10]Deactualizing possibilities include models of effectiveness not evaluated along the axiological dimension of actualization thus lending themselves to the "happy robot" process of "adjusting," "fitting" or more euphemistically, "integrating" individuals into organizations and societies without questioning the values of the particular organizational or societal contract (Argyris, 1964). In Brayfields' (1965) otherwise excellent plea for excellence, consider the implications of his statement: "The crux of the matter is the need to specify the common task requirements for effective functioning as a member of a complex society" (p. 647). Also Brayfield's quote from Talcott Parson's (1957) definition of "mental health" raises dystopian spectres of happy robots or even "good Nazis": "...the roles and tasks for which he has been socialized" (p. 176).

the dystopian axiology which fostered this warped organizational contract, however, was so destructive that the "best" members of the Gestapo (by praxiological criteria of efficiency and effectiveness) became the most deactualized and dehumanized (Dubos, 1968; Rutherford, 1973). Thus to the degree that "effective" individual behaviors, collective actions and other equivalent manifestations of value (e.g. policies, regulations, ideologies, laws, etc.) are contingent upon the infringement of other people's rights, they cannot be considered to be authentically actualizing (Erikson, 1964; Gouldner, 1967; Shostrom, 1967).

By the same token, when contractual transactions serve to mutually benefit all parties involved to that degree can the transaction be described as actualizing. Such outcomes of social process involving high degrees of mutual benefit have been conceptualized by Ruth Benedict as "social synergy" (Maslow, 1965).[11] Thus, highly synergic cultures are those which hold value systems which lead to contractual exchanges of high degrees of mutual benefit, or in game theory terms, these cultures display a preponderance of non-sum-zero transactions over sum-zero games.

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[11]Maslow (1965b) opens discussion with Ruth Benedict's statement:

> I shall speak of cultures with low synergy where the social structure provides for acts which are mutually opposed and counteractive, and cultures with high synergy where it provides for acts that are mutually reinforcing.... I spoke of societies with high social synergy where their institutions insure mutual advantage from their undertakings, and societies with low social synergy where the advantage of one individual becomes a victory over another, and the majority who are not victorious must shift as they can (p. 5).

Out of the history of the personal-social-societal contracts of man, three milestones have appeared in recent times: the United Nations' "Universal Declaration of Human Rights" (Schwelb, 1964) and encyclical, Pacem in Terris, of Pope John XXIII (1963) and this year, the Humanist Manifesto I and II (1974). It is interesting that they come out of the fields of international law, theology, and humanistic philosophy which (unlike the social-behavioral sciences and psychology in particular)[12] have held to models that have never divested man of his essential capacity to assume responsible contractual relationships, his potential capacity to choose and to assume both responsibility and accountability. All three of these unprecedented documents establish taxonomies of reciprocal human rights and responsibilities that emphasize the contractual relationships within and between social systems at all levels from individual to international. As does the "Universal Declaration of Human Rights, Pacem in Terris deals with the contractual nature of "rights and duties necessarily linked in the one person":

> For example, the right of every man to life is correlative

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[12]"...many think that the relationships between men and States can be governed by the same laws as the forces and irrational elements of the universe, whereas the laws governing them are of quite a different kind and are to be sought elsewhere, namely, in the nature of man.... (John XXIII, 1963, p. 6)."

> with the duty to preserve it; his right to a decent manner of living with the duty of living it becomingly; and his right to investigate the truth freely, with the duty of seeking it and of possessing it ever more completely and profoundly (p. 14).

In elaborating contractual relationships as the links which "bind men together" in all of their "mutual dealings" the attainment of a wide variety of actualizing "freely contracted" social contracts is advocated:

> ...it is most necessary that a wide variety of societies or intermediate bodies be established, equal to the task of accomplishing what the individual cannot by himself efficiently achieve. These societies or intermediate bodies are to be regarded as an indispensable means in safeguarding the dignity and liberty of the human person, without harm to his sense of responsibility (p. 12). There is an immense task incumbent on all men of good will, namely, the task of restoring the relations of the human family in truth, in justice, in love and in freedom: The relations between individual human beings; between citizens and their respective political communites; between political communities themselves; between individuals, families, intermediate associations and political communities on the one hand, and the world community on the other (p. 56).

Utopias or Dystopias and Destruction. This brings us, full circle, to a reconsideration of the place of utopias in human affairs generally, and in the social and behavioral sciences more specifically (Kateb, 1974). Bluntly put, it appears to many astute observers that mankind's present level of civilization--manifested in the international contract system--is not sufficient to prevent the

annihilation of the human species and guarantee man a place in the sun (Henshaw, 1971; Mills, 1959). Never before in the history of the world has concentrated technological and political decision power existed sufficient to effectively eliminate whole civilizations in a matter of minutes. To continue existence we cannot be content with prevailing social arrangements and models of man;[13] we must rapidly advance beyond our present level of civilization and develop more utopian civilizations, or what Boulding (1964) has termed "post-civilizations."

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[13]One of the most serious philosophical and psychological problems of our age may be to provide a view of man and his surroundings that recognizes the validity of situational causality without leaving the individual feeling helpless and unable to shape his fate. Part of that view will have to contain a more complex and sophisticated view of causality than the implicit constant-sum model that most people seem to hold (i.e., the more my environment is responsible for my outcomes, the less responsible I am, and vice versa). But until that state is reached, social scientists, especially those concerned with environmental determinants of behavior and thought, have a responsibility: we must recognize that much of our work holds the potential for further eroding an already changing social order and crumbling value system; and, therefore, it may be argued that we have an obligation to put something better in the place of that which we help destroy. It is in this spirit that Miller (1969) suggested that perhaps the most radical activity that psychology can undertake is to build a new image of man, more valid and hopeful than those of the past, and to freely dispense that image to anyone who will listen (Caplan & Nelson, 1973, p. 209).

As John Kennedy remarked--a long time ago--from the unique perspective that the office of the Presidency of the United States affords "Either mankind must eliminate war, or war will eliminate man."

The utopian option, as an alternative to the destructive consequences of dystopian societies, necessitates the discovery and invention of social arrangements which provide (1) better guarantees of life with (2) increasingly actualizing conditions. This then, is the basic task of human systems actualization: the development of descriptive, normative, and methodological taxonomies with which to identify, bring into existence, and evaluate those conditions (social, political, economic and psychological) that might facilitate the realization of human potential at all levels of organization. This is the empirical business of down-to-earth serious utopians (Toffler, 1970).

An important empirical step toward defining some of those social-political conditions essential to the development of more realistic utopias has been taken by the social psychologist, Hadley Cantril (1965). In his book, Patterns of Human Concerns, which describes a monumental cross-cultural effort, Cantril summarizes his work with an empirically derived, descriptive taxonomy of eleven human needs which people everywhere are increasingly demanding

of their societies. These requirements, which he calls collectively the "human design," range from satisfaction of basic survival needs, to the freedom of exercising personal choice, and the opportunity to develop human capacities to the fullest. He concludes that to remain viable a society must minimally meet human requirements for survival and beyond this level, an effective society is one that:

> ...enables the individual to develop personal loyalties and aspirations which overlap with and are cogenial to social values and loyalties, and which at the same time take full account of the wide range of individual differences that exist.
>
> Such a social organization must, too, become the repository of values, must provide symbols for the people's aspirations, must comprise and contain customs, institutions, laws, economic arrangements and political forms which enable an individual in various ways to give concrete reference to his values in his day-to-day behavior (p. 321).

To Cantril's definition of an effective society we would specify additional requirements to qualify as an actualizing or utopian society. To function at an actualizing level, a society (or any social system for that matter) must explicitly recognize and provide an expanding taxonomy of inalienable human rights and their corresponding obligations. By "inalienable rights" we mean those social-political conditions which bring about the progressive realization of human capacities at all levels and the "inalienable obligations"

reciprocally linked to inalienable rights are those corresponding tasks needed to maintain the social system. Both rights and obligations at all levels are considered "inalienable" for to the extent that either are not met to that degree is the actualizing function of the system vitiated.

Cantril's taxonomy of human requirements is of particular importance for it represents perhaps the first attempt by a social scientist to empirically establish those human needs which might qualify as inalienable rights and delineate the corresponding contractual social order required to meet them. That the failure of a society to meet its obligations to guarantee those inalienable conditions essential for human actualization can be internally catastrophic is appreciated by Cantril:

> If the gap between what his society actually provides in terms of effective mechanisms for living and what it purports to provide becomes too great, the vacuum created will sooner or later engender the frustrations that urge people on to seek new social patterns and new symbols (p. 321).

Thus to the extent that a given society does not meet its obligations in providing its citizens those conditions necessary for their actualization, or on the other hand, the constituent individuals, groups and organizations fail to carry out the obligated tasks essential to the maintenance of the society, the

society can be considered dystopian and subject to progressive decline or to the violent consequences which historically have marked and changed such contracts. Awareness of the inequitable discrepancies between "what is" and "what could or should be" in societal contractual arrangements as a preeminent source of tension and unrest often leading to civil conflict and violence is slowly beginning to be recognized by social scientists (Adams, 1965; Feierabend & Feierabend, 1966; Feierabend, Feierabend & Sleet, 1967; Orbell, 1967; Schwartz, 1967). Politicians and revolutionaries throughout history, however, have long appreciated this fundamental political fact--including Ex-President Sukarno of Indonesia who, recognizing the relevance of awareness of gross discrepancies between access to opportunities, power and the "goodies" of life (basic needs and luxuries) to national revolutions, once commented:

> The motion picture industry has provided a window on the world, and the colonized nations have looked through that window and have seen the things of which they have been deprived. It is perhaps not generally realized that a refrigerator can be a revolutionary symbol--to a people who have no refrigerators. A motor car owned by a worker in one country can be a symbol of revolt to a people deprived of even the necessities of life...(Hollywood) helped to build up the sense of derivation of man's birthright, and that sense of deprivation has played a large part in the national revolutions of postwar Asia (McLuhan & Fiore, 1967, p. 131).

Exercising the utopian option, this chapter proposes a theory of human systems actualization which is underpinned with the optimistic faith that mankind can and must reflexively improve itself through scientific, political, economic and social action before it reflexively destroys itself (Etzioni, 1968; Kahn & Wiener, 1967). With Buckminster Fuller, I agree that ultimately mankind must choose between oblivion and utopia and urge social and behavioral scientists to heed the apocalyptic admonishment of Kenneth Boulding (1964): "The social system you save may be your own."

CHAPTER V

CONTRACT SYSTEM LEVELS

From the contract systems perspective, models are developed for the delineation of human systems at all levels, at their actualization and at hitches in actualization (Graves, 1970). These ends-means hitches are often conceptualized as psychosocial problems, e.g. political, sociological, economic, or psychological disorders (Eron, 1966). The contract system approach to actualization, or to hang-ups, requires analysis not only at the level of organization at which the problems are most discernible, but also at relevant levels above and below (Kuhn, 1974). This implies that members of those disciplines concerned with the scientific study and resolution of these problems, not only function as specialists, but also retain (or in many cases acquire) the capacity to function as generalists in order to keep in perspective and appropriately weigh the higher and lower level determinants which create or contribute to, and maintain target problems (Gardner, 1964; Pratt & Tooley, 1965; Tooley, 1969). It is not a question of whether or not we would like to look beyond the traditionally constricted confines of our arbitrarily defined specialties, but that we must, or miss the point entirely (Mills, 1960; Smith, 1974).

The very nature and scope of the substantive problems faced by the social-behavioral sciences discredit the artificial barriers or definitions set up between the social sciences (Morane, 1967). We can no longer beg the question with the seemingly "objective" and modest excuse that consideration of those parameters is outside our area of competence and thus to be left to "others" while we proceed as if such determinants can be ignored or accepted as unquestionable givens. As Ackoff (1963) has chided "we must stop acting as though nature were organized into disciplines in the same way that universities are (p. 346)." Also acknowledging the complexity and interdisciplinary nature of current psychosocial problems C. Wright Mills (1959) has insisted:

> ...To state and to solve any one of the significant problems of our period requires a selection of materials, conceptions, and methods from more than any one of these several disciplines. A social scientist need not master the field in order to be familiar enough with its materials and perspectives to use them in clarifying the problems that concern him. It is in terms of such topical "problems" rather than in accordance with academic boundaries, that specialization ought to occur (p. 142).

Not only is multilevel analysis essential to understand the systems that we study, but more important, to change these systems it is often mandatory to intervene from different levels of organization as Sanford (1965) has indicated:

> In order to induce change in personality it may sometimes be necessary first to change the role structure in the organization in which the individual lives or works. By they same token, since we deal with a dynamic interaction

> between personality and social system, it may sometimes be necessary to change certain personalities in order to change the social system (Pp. 194-195).

Sanford also emphasizes the need for theoretical concepts which bridge levels of organization such as the self-system level and social systems levels. These necessary conceptual links, which articulate the transactional relationships between individuals and social systems within and between levels, are essentially contractual.

A variety of conceptual schema representing the organization of human systems is available and useful according to different purposes (Morane, 1967). Some are institutionalized social-political schema (e.g. international, federal, state, county, municipal, neighborhood); others are theoretical-empirical formulations such as Marney and Smith's (1963) elegant taxonomy of open systems, and Ruesch's (1966) multilevel formulation of social processes. Other elaborate schema which order phenomena from inorganic to superorganic levels of organization include the various general systems theories [1] (Bertalanffy, 1950;

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[1] Miller (1963, 1965a, 1965b) describes the application of a general systems theory to a wide range of research problems in the fields of biology, mathematics, and the social-behavioral sciences: "At the Mental Health Research Institute of the University of Michigan some of us work within the general systems orientation which regards all life as a part of the physical space-time continuum. We consider this continuum to be organized into a heirarchy of levels of systems, all of which have subsystems and are themselves subsystems of larger organizations or supersystems. The smallest living system, the cell, is composed of nonliving molecules. These may be free-living or may be components of organs, which in turn are organized into more complex individual systems. These may band into face-to-face groups or larger social organizations and societies (1963, Pp. 1-2).

Feibleman, 1954; Gray et al., 1969; Novikoff, 1945) and more recently, the culmination of Floyd Allport's (1967) ambitious thirty-year effort to formulate problems of social organization and disorganization which in his words:

> ...constitute the major forms of "enestruolysis," or "pathology" of organic beings; and they all seem to occur at all levels of organic or collective aggregates from the germ cell to nations or world organizations. And as such they are the targets of all the "therapies," medical, psychological, material and social that have been devised by men (p. 23).

Boulding (1956) presents an equally comprehensive model in "General Systems Theory--The Skeleton of a Science." This schema is somewhat unique in that it differentiates levels of organization in terms of their "predominant emergent characteristics":

(1) The static structure--a level of framework, the anatomy of a system; for example, the structure of the universe.

(2) The simple dynamic system--the level of clockworks, pre-determined necessary motions.

(3) The cybernetic system--the level of the thermostat, the system moves to maintain a given equilibrium through a process of self regulation.

(4) The open system--level of self-maintaining systems, moves toward and includes living organisms.

(5) The genetic-societal system--level of cell society, characterized by a division of labor among cells.

(6) Animal systems--level of mobility, evidence of goal-directed behavior.

(7) Human systems--level of symbol interpretation and idea communication.

(8) Social system--level of human organization.

(9) Transcendental systems--level of ultimates and absolutes which exhibit systematic structure but are unknowable in essence (p. 201).

Levels of human systems organization can be construed as interlocking contract systems. To gain purchase on a given target problem at whatever level it appears, all levels must be systematically considered in order to appropriately formulate the problem and to empirically check out possible sources of relevant variance (Morrell, 1973). An adequate model of human (psychosocial) systems should accommodate the following contract system levels, however, one chooses to label them:

(1) Self-system or individual contract systems;

(2) Interpersonal, primary or small group contract systems;

(3) Organizational and institutional contract systems;

(4) Community contract systems and networks;

(5) National or sociocultural contract systems;

(6) International contract systems and the "world community's" social contract.

These levels form a heirarchy of organizational complexity ranging from individual contract systems (within the interior contract space) through international contractual arrangements. Events at all of these levels potentially have repercussions

at all other levels. In Ashby's (1960) terms these levels are composed of "richly-joined environments": systems in which every variable is functionally related to all other variables, such that a change in one variable may effect (however minimally) the values of all other systemic variables (Heider, 1967; Kagan, 1967; Kuhn, 1974).[2] Currently most scientific inquiry, including theoretical and interventive endeavors, focuses upon intralevel events to the exclusion or neglect of other levels (Sarason, 1974).[3]

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[2]Like Weaver (1948), Churchman (1964) has grappled with these problems of organized complexity. "The artistry of science lies in its ability to recognize simultaneously that every event depends upon virtually everything else and yet to be able to estimate what occurred in a specific instance (p. 368)." From my point of view the degree of connectedness of a system is a continuous property, and human systems should be treated "as if" all variables were functionally related until systematic analysis is conducted to determine the degree and type of relationship between the variables in the system. As in art, where much may be selectively eliminated to reveal essentials, models and theories in science are employed to defy the complexity of reality by systematically ignoring some variables to better articulate other, more essential, characteristics of a system--a deliberate, but often useful form of reductionism.

[3]Typical of social scientists' neglect of the transactional relationships between levels-of-organization is the stance assumed by Lippitt, el al. in The Dynamics of Planned Change (1958): "Throughout this book we shall focus our discussion upon four types of dynamic systems--the individual personality, the face-to-face group, the organization, and the community. There are, of course, other strata of society at which organized problem-solving efforts and change continually go on, such as the national and international strata. But we have chosen to pay attention to these four types of systems and to a comparison of the ways in which they receive professional help. We have chosen to accept the implicit assumption of the cases which we have analyzed that to some degree systems of each type can be regarded as "closed systems" and that therefore they can be helped without paying attention to systems at the other levels (emphasis added, p. 5)."

CHAPTER VI

ORGANIZATIONAL CONTRACTS AND CONTINGENCY DISCREPANCY THEORY

The history of civilizations, which is the history of societal contract systems, reflects a spiraling growth toward more complex forms of social organizations (Seidenberg, 1951; Toynbee, 1957). In contemporary society every individual is directly and indirectly involved in organizational and institutional contracts. Modern man, his social institutions and society can only exist through sophisticated contractual organization (Hayakawa, 1967). Through contractual cooperation (consensual or coercive), rules of conduct and action are negotiated; and all parties to organizational contracts are expected to meet their contractual obligations in a reliable manner (Bronowski, 1956; Havighurst, 1961; Maine, 1861; Montague, 1950). The organizational complexity of life for man today, in both its actualizing and counteractualizing aspects, is a societal fact (Mandelbaum, 1955). Confronted with this societal fact--that all individuals (including psychologists) must participate in organizations and, in turn, be affected by the consequences of their participation--psychologists have no choice but to study these higher level contractual determinants of behavior. Sarason (1967)

has recognized this necessity:

> ...as psychological theorists move in the direction of stating comprehensive formulations about the determinants of human behavior they will become increasingly concerned with the nature of social organizations, the ways in which they change, and the consequences of these changes. This development will not be a matter of choice but rather of necessity in that in reality the relationship between the individual and the "organized settings" is not a matter of choice. The problem for theory is how to go beyond token gestures to these relationships, how to study and understand the extent of variations in these relationships, and how to begin to formulate generalizations which do justice to the complexities involved (p. 227).

As indicated in the previous chapter, organization contracts are considered as affecting each other, and as being affected by higher level societal contract-systems on the one hand, and on the other by lower level small-group and self-system contracts. Organizational contracts, in turn, transactionally affect both societal level and individual level contract systems. It becomes a matter for empirical investigation to determine for any given problem at which level(s) the contractual determinants or loadings are located. It needs to be re-emphasized that there is not inherently an antithetical relationship between organization contracts and the individual as pictured by Argyris (1964) just as there need not necessarily be a counteractualizing assault between any system levels

per se (Bennis, 1974). Conceptualizing the individual-organization-societal interfaces as absolute intrinsic antinomies is contractually untenable: contract systems at all levels and between levels may be actualizing or counteractualizing, adequate or inadequate, synergistic or dysjunctive, prodigal or impoverished, but they obtain. Inexorably, every man, woman and child, for better or worse becomes involved (enmeshed or ennobled) in and through organizational contract systems. People are positively and negatively shaped by organizations. People are also shaped by how they, in turn, are able to, or choose to, shape and use organization (Bennis, 1973). Organizations can be used, and can be created, for actualizing or counteractualizing purposes. To organize means to get together to carry out a purpose. The purposes of an organization (over or covert) may be actualizing or counteractualizing for all or some of the parties to the organizational contract.

The organization-as-a-system can best be conceptualized as being comprised of multiple sets of contractual exchange systems, or contract-system reciprocity networks. Actualization of component systems is frequently contingent upon the actualization of other subsystems and of the total organization (Pratt & Tooley, 1966b, 1968; Tooley, 1974).

Organizations, groups within organizations and individual members, may be actualized or underactualized to various degrees. Organizations themselves may be actualizing or counteractualizing. So-called "socializing institutions" all too often exacerbate the very conditions they are ostensibly designed to ameliorate: educational institutions (from graduate school to kindergarten) turn out "trained-incapacity," prisons produce criminals, schools for the blind make people "blind," rehabilitation centers cripple, welfare agencies degrade, schools for the retarded teach stupidity, while "mental hospitals" drive people crazy or make crazy people crazier (Tooley & Pratt, 1970). The documented literature condemning the iatrogenic institutions to which people are condemned (largely because they are troublesome to themselves or to others) has become voluminous. Such institutions are counteractualizing; they are "dehumanization machines"; they have institutionalized human deactualization; they operationalize the concepts of "inhuman," "evil," or "bad,"--they have made "institutionalized" a bad word (Blatt, 1973; Bragisky, et al. 1969; Henry, 1971; Wallace, 1974).

Just to give the flavor of a few current references:[1]

Gross (1970) Radical School Reform; Palmer (1970) "Crane

[1]For the past decade, Steve Pratt and I (see bibliography) have struggled with the problem of iatrogenic organizations, focusing mainly on the mislabeled "mental health" field: "How Crazy Ideas Lead to Crazy Practices in Hospitals, Clinics and Cities" (1968); "Speaking in Tongues: The Public-Professional Contract" (1967); "Innovations in Mental Hospital Concepts and Practice" (1967); "Myths, Models, and the Mental Health Metaphor" (1963); "Psychic Psoriasis: The Role of the Psychologist in the Prevention of Progress" (1963); "Why Has Care Lagged" (1962); "The Mental Hospital and the Treatment Field" (1960).

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High: Factory for Futility--Fires, Fights, Chaos";

Scott (1969) The Making of Blind Men; McDaniel (1969) "Deaf Power Next?"; Chapman (1970) "The Changing Scene: Revolution of the Handicapped?"; Dexter (1964) The Tyranny of Schooling: An Inquiry Into the Problems of Stupidity;

Menninger (1968) The Crime of Punishment; Harris (1969) "Better Prisons or Better Crime?"; Kilpatrick (1969) "Figures Belie Penal Rehabilitation"; Shevin (1970) "State Jails Turning Out Better Crooks"; Jordan (1969) "Prisons Called Public Vengeance, Crime Schools for Rejected Men";

Elman (1968) The Poorhouse State: The American Way of Life on Public Assistance; Phillips (1967) "The Iatrogenic Environment: A Transactional Framework for Social Research"; Alinsky (1965) "The War on Poverty--Political Pornography":

Goffman (1961) Asylums: Essays on the Social Situation of Mental Patients and Other Inmates; Vail (1966) Dehumanization and the Institutional Career; Stewart (1965) "On Keeping Mental Patients Chronic"; Christ and Wagner (1960) "Iatrogenic Factors in Residential Treatment: The Psychiatric Team's Contribution to Continued Psychopathology"; Lehrman (1961) "Do Our Hospitals Help Make Acute Schizophrenia Chronic"; Mahrer (1963) "Psychological Symptoms as a Function of Psychiatric Hospitalization"; Wing (1962) "Institutionalism

in Mental Hospitals"; Szasz (1970) The Manufacture of Madness; Leifer (1969) In the Name of Mental Health; Diamond (1967) "The Increase in Physical Disorders Among Mental Hospital Patients"; Ewald's (1964) "Functions of the State Mental Hospital as a Social Institution"; Talbot and Miller (1966) "The Struggle to Create a Sane Society in the Psychiatric Hospital"; Talbot, Miller and White (1964) "Some Antitherapeutic Side Effects of Hospitalization and Psychotherapy."

Paying attention to the fact that iatrogenic organizations operationalize the notion of "evil" (operationally defined) may rehabilitate the concept and make it scientifically respectable (Becker, 1968). In "Toward a Sociology of Evil," Coser (1969) appropriately defines evil as constituting "hangups" or "hitches" in exchanging more utopian (actualizing) social arrangements for existing dystopian (counteractualizing) contracts. Such hangups are not simply the result of technological shortcomings but of conscious opposition, of active blocking or obstruction of progress. Writing "On the Visibility of Evil" Wolff (1969) ominously outlines alternate ways of responding to increasingly obvious institutionalized evil--from intensified denial of injustice, to rationalization of exploitation ("Sure

those things are bad but after all let's be realistic..."), to open endorsement of inequity--all of these as against the possibility of coping constructively with evil. Also consider Evil in Man: The Anatomy of Hate and Violence (Bychowski, 1968); and Becker's (1968) The Structure of Evil: An Essay Towards the Unification of the Sciences of Man.

History demonstrates that the range of the human capacity for good and for evil (the inhumanity of people to people) is indeed incredible (Pratt, 1970; Tooley & Zimmerman, 1973). Communication theory solutions and the human relations approach per se are not enough. Structural discrepancies, inequities, counteractualizing contracts are not necessarily accidental nor unavoidable or be alleviated by process methodologies (Guttentag, 1966; Tooley, Zimmerman & Pratt, 1966). There are social groups, organizations, and individuals who have real (and/or perceived) vested-interests in maintaining, maximizing, and creating counteractualizing discrepancies. They are in a position to play an exploitive, manipulative or coercive, anti-synergistic, power-based sum-zero game. This is often to their advantage or aggrandizement, in terms of money, power-control and ego-enhancement. With some notable exceptions, these interests are concentrated in the corporate-military-union-

church-professional-government-academic complex (Nader, 1972; Reich, 1970). In testimony presented at the Federal Hearings on Human Resources Development and Research, Brayfield (1968) stated in part:

> Our economic system aims to energize and organize the productive capacities of a people to the end that they will, through the mechanism of an exchange arrangement, be provided with goods and services. In this economic system the production of goods and services is the major justification for the form which it takes. It is concerned with the development of human resources only secondarily and, in fact, mainly as they serve the ends of private ownership, which is the distinguishing characteristic of the system. Our economic system is readily geared to the exploitation of human beings for personal advantage and all too frequently caters to the basest motives and the meanest talents; it does not have as a prime goal the nurturance or development of social motives or behavior or constructively useful talent (p. 482).

Organizations can be described in the language of contractual contingencies (Lawrence & Lorsch, 1969; Schein, 1965). There may be gross deficiencies in the development of organization-system potentialities, or gross deficits in the general availability of opportunity structures within the organization (Leavitt, 1962; McGregor, 1960; Mizruchi, 1964).[2] Iatrogenic organization contracts, of course, offer almost unlimited opportunities for

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[2]Forehand and Gilmer (1964) have summarized research relating to three ways in which the organization contract ("organizational climate") may affect behavior: (1) by defining the stimuli which confront the individual, (2) by placing constraints upon the freedom of choice of behavior, (3) and/or by rewarding and punishing behavior (p. 369).

the development of negative potentialities, for negative opportunity structures, for counteractualizing, explitative, zero-sum games, for counteractualizing operant behaviors, for counter-actualizing reinforcement, for counteractualizing contingencies. The objective, however, is to discover and invent positive potentialities, to create actualizing opportunity structures--to transform zero-sum into non-sum zero games as discussed in the previous chapter.

Within the organization, at the individual or group level there may be deficiencies in (1) behavioral repertoire e.g. in operant behaviors or skills (competence), and in expressive behavior; there may be deficits in (2) reinforcing events or reward systems. Both discrepancies may be quantitative (in number or numerical range) or qualitative (in terms of adequacy or quality of range). And there also may be (3) deficiencies as between (contractual) behaviors and their appropriate reinforcement contingencies (Skinner, 1966; Tharp & Wetzel, 1969). The latter type of deficiency can be thought of as being analogous to the concept of "structural unemployment" in economics. In "structural unemployment" there are large numbers of persons (groups) and large numbers of certain jobs but no contractual arrangement or opportunity structure that puts the persons, with their behavioral skills, together with the jobs--thus the paradox of unemployment in the face of a "labor shortage" such as with teachers today. Or there may be

people with obsolete skills, or simply without any marketable skills. Ferster (1965) writing about behavior disorders, competence and self-direction uses this illustration:

> Thus, instead of altering his own behavior so as to make it conform to the reinforcing practices of the existing milieu, the individual alters the milieu; for example, he moves to a new community so that it can maintain his existing repertoire. Such would be the case with an unemployed worker who moves to a new city where employment relative to his skills is available (p. 22).

Ferster indicates that there are several ways in which the person can resolve the discrepancy between his behavioral repertoire and the situational (or organizational) opportunity structure (i.e., patterns of accessible contingencies of reinforcement). Thus, instead of altering his behavior to conform to existing milieu, he can alter the environment. He can "alter" the milieu by moving from a bad situation to a good situation. He can leave the present field for greener pastures--but what if he can't leave or if greener pastures don't exist or are not accessible." It should not be overlooked (because in some situations this may be the most realistic or only solution)--he may alter the present situation by changing it directly. He can attempt to renegotiate his present organization contract, either individually or through organized group effort. Thus,

whether one likes it or not, direct action is taken by such groups as Student Dissidents, Vietnam Protest, Slum Building Squatters, Black Militants, "Womens' Lib" (e.g., N.O.W.), and Unions.

All permutations of deficiencies may obtain within and between contractual behavioral repertoires and contractual reinforcing events or the existing reward structures (Ferster, 1965). These permutational sets of deficiencies can all be categorized as one form or another of counteractualizing contingencies--contingency deficits or contingency conflicts (Deutsch, 1969; Halpern, 1968).

Such discrepancies engender tension states[3] which may be reflected in withdrawal or apathy, in some form of accommodation, in action for change, or even revolution as elaborated in Chapter IV. Action for change itself can be, of course, either counteractualizing (even catastrophic)--or actualizing as

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[3]Perhaps Heraclitus was the first to hypothesize that all social progress extends from tension (Goheen, 1970). It should be noted that this concept of tension need not be associated with motivational theories based on homeostatic need or tension reduction models such as Maslow's.

It is interesting that Schlesinger (1969) from a psychoanalytic perspective, adduces the "tension system" involved in "making promises" (i.e. reflexive or interpersonal contractual commitments) as central to his motivational system. Homme and Tosti (1965) use "contingency contracting" as the key construct for their behavioristically derived theory of motivation.

Moynihan (1969) and others have pointed out (Pilisuk, 1974; Toffler, 1970). In the latter case, "discrepancy-produced-tension" can be construed as a motivational vector or dynamic, for change from a less advantageous condition (dystopian) to a more advantageous (more utopian) condition (Becker & McClintock, 1967; Cantril, 1965; Henshaw, 1971; Thomas, 1969).

> The characteristic feature of man is action (purposive ends-means conduct). Man aims at changing some of the conditions of his environment in order to substitute a state of affairs that suits him better for another state that suits him less (von Mises, 1962, p. 34).

This tension generated by real, or even perceived discrepancies can be referred to as the "discrepancy dynamic" or as the "utopian-dystopian dynamic" (Tooley, 1974).

Adams (1965) has developed a research-based theory of inequity that specifies both antecedents and consequences of perceived injustice (inequity) including effects on cognitive processes and behavior.

> Finally, it may be noted, if it is not obvious, that injustice (inequity) is a response to a discrepancy between what is perceived to be and what is perceived should be (p. 272).... Men do not simply become dissatisfied with conditions they perceive to be unjust. They usually do something about them (p. 276).
>
> ...anger that realizes the void between the way things should be, and the way things are (Moorman, 1969, p. 72).

Adams (1965) has critically reviewed the experimental literature dealing with research in the area of inequity in social exhange. It is immediately apparent that the construct

of inequity is exactly what discrepancy theory is about. The concepts of "equity-inequity," "distributive justice," "relative deprivation," "reciprocity imbalance," "perceived injustice" (either reality-based or misperceived), "cognitive dissonance," "social responsibility,"[4] and "social justice" (Leopold, 1973) can readily be related to the discrepancy theory construct of discrepancy dynamic.

Social concern and the struggle to correct injustice, to remedy inequity and oppression, to enlarge options and opportunities are all connected with Adler's (1938) key concepts of Sorge und Gemeinschaftsgefühl (concern and social interest). Discrepancy-derived tension resulting in social action can be conceptualized as the struggle for power and freedom--what Adler called Freiheitstrieb. Here I refer to degrees-of-freedom for choice and action (contract alternatives, options) with power defined as the capacity to effect outcomes (Champlin, 1974):

> Thus our concern is with the shaping of behavior--with the acquisition of skills and habits that individuals can use to secure for themselves the social and other

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[4]The theoretical and empirical groundings for each of these constructs can be found in the work of Adams (1965), Adams and Rosenbaum (1962), Argyris (1969), Berkowitz and Daniels (1963), Blau (1964), Festinger (1957), Fouraker and Seigel (1963), Gouldner (1960), Homans (1958, 1961), and Jacques (1961).

> rewards that sustain behavior. The acquisition of a more adequate behavior repertoire opens alternative avenues of action for the individual and promises the possibility of choice--the essence of freedom (Brayfield, 1968, p. 480).

This then is the purpose of contract systems theory--the actualization of human systems (Pratt & Tooley, 1964, 1967b, 1967c; Tooley, 1971a, 1972a, 1974).

CHAPTER VII

PARTICIPATIVE ORGANIZATIONAL CONTRACTS

"Organizations are grand strategies individuals create to achieve objectives that require the efforts of many (Argyris, 1960, p. 24)." Participative organization would maximize the effective power of the many (of all parties to the organization contract) by having all take part in the formulation of goals, in policy-formulation, in administration. All participants become "generalist-specialists," all have both "line" and "staff" responsibilities.

Effects of participation have been studied extensively from the early work of Lewin, Lippitt and White (1939) on styles of leadership to such studies as those by Coch and French (1948) on degrees of participation in planning; Morse and Reimer (1956) on decentralization of authority; and Kidd and Christy (1961) on relating type of supervisory approach (laissez faire, direct participation, and active monitor) to productivity. In their comprehensive work, "Environmental Variation in Studies of Organizational Behavior," Forehand and Gilmer (1964) conclude that:

> ...one of the few general hypotheses concerning organizational variation that has been investigated with any degree of thoroughness might be stated as follows: An organization

> in which personnel policies are participative, democratic, unstructured, will differ from one whose practices are nonparticipative, authoritarian, or structured in that productivity, and employee satisfaction will be higher. There is evidence in support of this hypothesis, much of it summarized by Likert (1961) (p. 368).

In Control In Organizations, Tannenbaum (1969) concludes that influence or control is not a fixed quality which must be divided among the heirarchical levels of the organization but that it can be thought of as a thing of which everyone can have more (i.e. as with a non-zero sum game). Reviewing the relevant research literature Tannenbaum finds that there is considerable evidence presented that those organizations in which all levels feel that they have more influence are also more effective. It is of course important to ascertain whether "feel that they have more influence" is reality-based or another version of pseudo-participation. In other words do all levels de facto have more influence and power or is this just another manifestation of exploitative manipulation or tokenism (Bennis, 1966b; Gomberg, 1966; Gomberg & Marrow, 1966). There is empirical evidence that it is not simply the feeling that one is participating (so-called "psychological participation") but rather it is actual participation, that is important (Tannenbaum & Smith, 1964).

> If the organization does not have clear goals and cannot develop a sense of identity, there is nothing to be committed to and nothing to communicate. At the same time, no organization need have its goals and identity imposed by its top executives. There is no reason why the organization cannot develop its goals and identity collaboratively and participatively, engaging every member down to the lowest echelons (Schein, 1965, p. 106).

Pugh (1966) summarizes the literature, from the early Hawthorne studies to Likert's (1961) New Patterns of Management, and concludes they "all add up to an impressive body of data" demonstrating that "communication and participation in decision making are among the most "significant rewards which can be offered to obtain the commitment of the individual (p. 241)." A review of communication studies indicates that a participative, nonheirarchical organization contract (as opposed to heirarchical, authoritarian, nonparticipative contracts) provides a climate more conducive to the production of new and innovative ideas (Blau & Scott, 1962).

In Management by Participation (Marrow, Bowers & Seashore, 1967), strategies-for-change which involved attempts at "power equalization" throughout the organization (Harwood Manufacturing Company) were empirically linked, positively, to specific outcome criteria: cost-production criteria as well as attitude, job satisfaction, initiative for problem-solving, etc. Of all the strategies for organizational change, Leavitt (1964) concludes that "power

equalization" strategies are the most influential--

> They share an emphasis upon pushing the power and responsibility for decision making as far down in the organizational heirarchy as possible, establishing relationships of mutual trust and authenticity, and keeping all channels of communication open. They also share assumptions that employees, in general, will be more satisfied and more productive when working under such conditions (Forehand & Gilmer, 1964, p. 377).

Bureaucratic structure is rigidly heirarchical with the directionality of power-authority moving down, from top to bottom. Participative administration turns the power-pyramid upside down. The development of the trend toward such a dispersion, if not inversion, of the power-structure can be followed in the literature: from "Pine" to "Oak" type organization contracts (Etzioni, 1960, 1961; Henry, 1957), from bureaucratic "pyramidal" to a "hexagonal" structure of levels-of-authority (Forehand & Gilmer, 1964), from "Tall" (centralized) to "Flat" (decentralized) (Porter & Lawler, 1965). All of these approaches call for increased four-way influence and communication channels: horizontal (back and forth) and vertical (up and down). Compatable concepts include distributive leadership, delegated and shared responsibility-authority-accountability (Tooley, 1971).

Argyris (1967) comments that Forrester, writing in Industrial Management Review recommends that the organization of the future

"eliminate superior-subordinate relationships and substitute for them the individual self-discipline arising from self-discipline arising from self-interest created by a competitive market mechanism within the system. The individual would negotiate continuously changing relationships (Pp. 21-22)." Argyris sees the emergence of this prediction in the increasing use of the Likert-type, Link-Pin Task Force within the "Project Team matrix" organization contract. Burns and Stalker (1961) introduced a continuum to which organization contracts could be ordered on the dimension of flexibility-rigidity (in reference to policy formulation, power-authority allocation, decision-making, position-role configuration, etc.). Pilisuk and Hayden (1965) on a grander scale developed a continuum to which organizations or nations could be ordered on sets of dimensions representing degrees-of-democracy versus lack of options for democratic participation.

The trend toward increased representation, or participation for all parties to the organization contract can also be traced as a reaction against the rigid role constraints of the bureaucratic-type of contract.[1] It is in this context that

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[1]Classic, current and comprehensive critiques (advocates and adversaries) of the bureaucratic organization contract are plentiful; for a sample consider Bennis (1963) "Bureaucracy and Social Change: An Anatomy of a Failure," Bennis (1970) American Bureaucracy, Dubin (1949) "Decision-Making by Management in Industrial Relations," Gouldner (1955) Patterns of Industrial Bureaucracy and Merton (1940) Bureaucratic Structure and Personality.

Brown (1960) called for the transformation of informal "upward" communication systems into formal "Representative System." As we have seen one could readily trace the thrust for increased democratization of organization contracts through much of the work of McGregor (1960), Lewin, Lippit and White (1939), Likert (1961, 1967) Blake and Mouton (1964), Gouldner (1959), Bennis, (1966a) Argyris (1964) and many others. It becomes explicit in titles such as "Every Employee a Manager" (Myers, 1968) or Management by Participation: Creating a Climate for Personal and Organizational Development (Marrow, Bowers & Seashore, 1967).

This democratic trend culminates in the extreme position that as a result of mounting pressure for increasingly equitable organizational contracts, democracy is inevitable within organizations, and furthermore that democratized organizations ultimately will result in a democratic society. "Warren Bennis and Michael Crozier, among others, have written that the society of large and complex organizations will make man free, will mean the inevitability of democracy (Krager, 1970, p. 78)."

Organizational Contingencies

An organization can be construed as being comprised of a network of interlocking sets of role relationships (Katz & Kahn, 1966). These are essentially contractual relationships involving

the exchange of obligations (e.g. role-tasks) and benefits (role-rewards) (Blau, 1964; Gouldner, 1959; Hodgson, Levinson & Zaleznik, 1965; Parsons, 1951, 1957; Perucci, 1966; Ruesch, 1966; Schein, 1965). In the language of contingencies, this contractual exchange involves sets of operant behaviors and reinforcing events. Contingencies can be either actualizing or counter-actualizing (Krasner, & Ullmann, 1965; Tharp & Wetzel, 1969; Ullmann & Krasner, 1966).

With a general systems approach to organizational and individual behavior, the concept of operants can be extended, beyond its usual application to individual behavior, to the behavior of groups or organizations (Baker, 1973). The language of contingencies (operant and reinforcing contingencies) can be used, and used operationally, in connection with human systems, within and between all levels-of-organization e.g. from intrapsychic as with self-reinforcement, to person-group, to organizational, to international exchange (Andreas, 1969; Homans, 1961).

The ends (ideals-goals-objectives) of a democratic organization can never be achieved unless the means to those ends are placed in the hands of all parties (constituents) to the organization contract. These ends-means configurations are contractual and can be expressed in the language of contingencies. The purpose of a

participative organizational contract is to make it possible for all parties to have formal (as well as informal) representation (Pitkin, 1974). All parties must have access; must have representation formalized and legitimized through ensystem-atization, through being incorporated within the system. This means access to wider ranges of contingencies: job-enhancement, job-enlargement, "generalist-specialist" roles, "line" and staff responsibilities.

It is interesting that Scott Myers and colleagues (1964, 1968) working on their version of "job enrichment" (at Texas Instruments) have researched and written extensively about what they call the "therapeutic value" of participation in a more democratic organization contract. They present a conceptual and operational framework:

> ...to erase the management-labor dichotomy and give substance to a slogan every employee a manager--a manager being defined as one who manages a job. A self-managed job is one which provides a realistic opportunity for the incumbent to be responsible for the total plan-do-control phases of his job.... Job enrichment (vertical and horizontal) is an iterative process.... Judged as they are year-to-year, in terms of profit, cost reduction, cash flow, and return-on-assets criteria, job enrichment is seen as a significant resource for achieving success. But it offers even greater rewards on a long-term basis, particularly if criteria of success are broadened to include aspects of human effectiveness, such as self-actualization of employees, responsible civic and home relationships, and the profitable and self-renewing growth of the organization...

> the implementation of job-enrichment principles in industry has great potential for developing a pattern of responsible behavior learned through a way of life at work which can influence people's behavior in their multiple roles in the community and family.
>
> William Glasser's (1965) new approach to psychotherapy points up the therapeutic value of enriched work. Rejecting a classical concept of mental illness and style of therapy, Dr. Glasser defines a process to help the individual face reality and accept responsibility for satisfying his needs in a way that does not deprive others of the ability to fulfill their needs. He shows that opportunity to love and be loved and to feel worthwhile to themselves an others is essential for responsible behavior.... Enriched work offers such an opportunity for healthful interpersonal relationships by enabling people to act responsibly in the pursuit of meaningful goals...providing conditions for the development of others and thereby bringing about his own self-development (Meyers, 1968, Pp. 18-20).

Thus as argued by Argyris (1962) in Interpersonal Competence and Organizational Effectiveness, organization effectiveness and personal actualization, again, are found to be reciprocal and transactionally interdependent.

CHAPTER VIII

FROM MENTAL HOSPITAL TO CENTER FOR HUMAN ACTUALIZATION

> It must be remembered that there is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new system, for the initiator has the enmity of all who would profit by the preservation of the old institution and merely luke warm defenders in those who would gain by the new ones (Machiavelli, circa 1513).

The previous chapters have outlined a theoretical rationale for human system design and management; the succeeding chapters will illustrate their application to a large scale social experiment that occurred during the period 1966-1969. In 1966, Dr. Steve Pratt was appointed to be the first psychologist as superintendent or director of a large state mental hospital.[1]

The hospital itself was founded in 1847 by Dorothea Dix and was the first mental hospital in the State of Illinois. Its history from its beginnings was typical of all such

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[1]This was the historic and--at that time--courageous act of Dr. Harold Visotsky, then Director of the Illinois Mental Health Department (Tooley, 1971a). At that time the imperialistic grip of organized psychiatry was so strong that on the front page of every issue of the Newsletter of the Association of Medical Superintendents of Mental Hospitals a black-bordered warning appeared proclaiming as top priority the prevention of non-medical superintendents.

RESOLUTION

THE COUNCIL OF THE ASSOCIATION OF MEDICAL SUPERINTENDENTS OF MENTAL HOSPITALS UNANIMOUSLY AFFIRMS, AND THE MEMBERSHIP RATIFIES, ITS POSITION OF DEPLORING THE RECURRING EPISODES IN SEVERAL STATES, WHEREBY PHYSICIANS TRAINED IN PSYCHIATRY ARE BEING SUPPLANTED BY NON-MEDICAL PERSONNEL AS THE CHIEF EXECUTIVE OFFICERS OF STATE MENTAL HOSPITALS.

institutions and has been historically chronicled and sociologically critiqued at length (Fisher, Mehr & Truckenbrod, 1973; Goffman, 1961; Pratt & Tooley, 1962a, 1967a). Any reader of Goffman's (1961), Asylums, would have instantly recognized the social structure, organization and process that obtained in that institution in 1966.

It basically was a human warehouse, but politically and professionally it was known--as the term has it--as a "custodial mental hospital." The ubiquitous staff-inmate caste system was there; no one really expected to get out (staff or inmates) and staff and community were in general collusion to maintain that grim status quo.

The hospital was staffed and run largely by the nursing service; the previous superintendent was a benign (?) physician who had spent most of her latter years in retirement. Of the 1200 odd staff there a handful of foreign-trained[2] physicians and the psychologists and social workers were, with an occasional exception, without Ph.D.'s or M.S.W.'s--again a situation not atypical of large, isolated mental hospitals.

The organization of the institution was no stranger, either: admission wards; so-called "continued treatment wards" (a

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[2]In most cases this could be translated as inadequately trained.

euphemism at best); medical-surgical wards; violent wards; "discharge wards" (another misnomer) and even, of all things, a tuberculosis ward.

We had spent some years in Kansas preparing for the task and had a model to try out (Pratt & Tooley, 1964). We knew where we wanted to go and at least some notion about how we wanted to approach the enormous task of upending an incarcerative mental hospital and transforming it into a "Center for Human Actualization" or "Institute-for-Living." As Muzekari (1970) noted:

> Pratt and Tooley (1964) present a model for the total transformation of mental institutions into "Institutes-for-Living" reflecting the trend toward effecting a rational and congruent pattern of human and organizational relationships both within the institutional complex and between the institution and relevant community resources. Previous emphasis on intraorganizational processes gives way to development of increased interaction and interdependence between the mental institution and the extramural community by relating the institution to, and making it a part of, its supporting environment (Pp. 79-80).

The goal was to transform an isolated medically-dominated organization into a community-integrated Center for Human Actualization organized along the contractual, learning theory model explicated two years before (Pratt & Tooley, 1964).

Given that purpose, the existing constraints and resources, what steps does one take and what strategies does one employ?

Taking a cue from Chairman Mao that an understandable, widely disseminated philosophy is essential to social change we began the process by promulgating among staff, clients and community a thirteen point philosophy to serve as a guide for policy formulation, program development and "clinical" practice (Tooley & Pratt, 1966b):

1. As long as we're alive there's room for improvement, capacity to change; and all behavior, no matter how disturbed or retarded, can be modified for the better. Treatment-oriented evaluation emphasizes an individual's assets, aptitudes and potentialities rather than an exclusive preoccupation with "psychopathology." Concern is not with personality disorder or behavior deficit per se, but only as these difficulties tend to interfere with effective, satisfying living.

2. Responsible and competent behavior is our objective. To increase their capacity for responsible behavior, people require opportunities to assume responsibilities in all aspects of daily living; people need to learn from their successes and from their mistakes; to learn the positive consequences of responsible behavior and the negative (self-defeating) consequences of irresponsible behavior. An Institute-for-Living can create social-systems which will elicit and reward competent social behavior. This involves learning new skills, roles and attitudes; learning how to learn; and developing behaviors for coping with change, hardship, frustration and success. Meaningful success requires struggle, concerted effort, humor and wisdom.

3. Every interpersonal transaction can provide an opportunity for personal growth, learning or problem-solving. Our Institute-for-Living, as a community-oriented social-system, can provide for a wide variety of such actualizing transactions. This "treatment-field," patterned after realistic community living, could approximate eight hours of actualizing activity (e.g. meaningful work),

eight hours of creative use of leisure, and eight hours of restorative rest. Such an "8-8-8" Program should function increasingly as a participant-governed, "guided democracy." Again, the objectives are increased responsibility, competence, a sense of effectiveness; and an authentic sense of values, of personal value, of being valued by others.

4. That people often help themselves most through helping others, is known as the "therapeutic principle of helping." This principle has far-reaching implications for staff, clients, and collaborating community citizens as we all become co-therapists, co-researchers, co-change-agents.

5. As every interpersonal transaction can provide an opportunity for personal growth, learning or problem-solving, every member of the total staff should become involved in, and expect to make a significant contribution to, treatment and training programs. This applies to every employee, without exception, whether classified as clinical, business, dietary, engineering, etc.; nonprofessional or professional. Only in this way can each person maximize his "therapeutic potential" and increase his sense of personal participation in, and identification with, his organization's goals.

6. Except for some acute or chronically ill patients who require care and treatment within the Medical-Surgical Complex, our residents should be regarded (by themselves and others) as very active participants in their own treatment programs. This is in contrast with the passive-dependent-receptive "sick role" traditionally prescribed for patients in custodially-oriented mental hospitals.

7. The people (staff, clients and community citizens) who are to take part in treatment programs (aimed at developing responsibility) should increasingly contribute toward the design, development, implementing and evaluation of all such programs. This kind of total staff-client-community participation restores the total task of the organization to the proper parties who thus regain their power-of-agency. People can become their own change-agents and thus gain authentic competence through collaboratively solving their problems.

8. Every employee has both staff and line responsibility and accountability. Democratic philosophy is reflected in administrative policies that expect all staff, client and community citizens to take part in program development. This offers many opportunities but at the same time places heavy demands on all parties: these are the opportunities and demands involved in distributive leadership--shared responsibility and authority are always coupled with shared accountability! As competence increases, decision-making is shifted downward in the de-centralized administrative hierarchy to the level at which the decision is to be implemented. At this point consequences can be directly connected with actions; thus both positive and negative feedback can be optimally exploited.

9. A three-dimensional-space communication-system model should be developed. This could incorporate a rapid-return four-directional pathway network: reciprocal 2-way vertical (down-up), coupled with reciprocal 2-way horizontal (between i.e. to-from) networks.

10. New social learning treatment concepts are developing so rapidly that traditional professional training institutions and universities are generally unable to keep abreast of the times. Thus, to minimize the obsolescence of trained-incapacity, we must develop our own inservice Program-Integrated-Training for Total Staff. Keeping in touch with progress, internationally, our innovative training-education-evaluation program must extend and renew itself by continuously training new trainers. The on-going objective is to involve all staff-client-community citizens as co-teacher-learners.

11. As an "Institute-for-Living" we encompass a Medical-Surgical Complex plus four on-campus regional Comprehensive Mental Health Centers (CMHC's). Each of these four Centers serves exclusively one of the four subzones of our 18-county Zone. The total staff of each Center constitutes a Team that works in collaboration with clients and with all community agencies within the counties it serves. Each Team is responsible for developing a comprehensive range of community-integrated services and for continually improving these in the light of feedback and evaluation.

12. As change-agents we have a contract for change and exchange: Our contract-for-change is based on the concept that any "final" solution to psycho-social problems requires that target groups increasingly become their own change-agents. We need to continually develop this philosophy as policy and apply it equally to: community, institution, staff, and clients.

13. Our goal is the total transformation of a "total institution"--from a custodial-orientation to a client-centered, community-integrated "Center for Human Actualization." A progressive staff and clients' council collaborate with an enlightened citizenry to effect an all-purpose program of treatment, training, education, and social-action-research (innovation and evaluation).

Given this philosophical statement we mapped a strategy of four contractual steps for structural change that will be described in the following chapter.

CHAPTER IX

CREATING A CENTER FOR HUMAN ACTUALIZATION: FOUR CONTRACT STEPS

Step One: Pragmatic Cartesian Dualism

An immediate problem was to deal with the historic medical model of conceptualizing human problems and the subsequent medical organization of human services that characterized not only that organization, but mental health organizations nationally.[1] Our strategy was one of containment: pragmatically to divide those human problems that were basically physical from other behavioral, or psychosocial problems-in-living.

Organizationally this was expressed by establishing a Medical-Surgical-Infirmaries complex that was to be our hospital for those with diagnosed physical diseases and disabilities. This dualism was to imply that the medical model was not to be pre-empted or "done-in" but that it was quite appropriate for certain purposes. At the same time new resources and new status was officially accorded the Medical-Surgical-Infirmaries complex and it became, in fact, what it should be--a

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[1]Here, with other historical issues, the hard controversy over the "medical model" in all of its protean forms is best taken in the original (Fisher, Mehr & Truckenbrod, 1973; Pratt, 1961; Pratt & Tooley, 1962b; Stuart, 1970; Szasz, 1961; Tooley, 1971a; Ullmann & Krasner, 1965).

hospital,[2] leaving the remaining organizational units to become social treatment-oriented comprehensive community mental health centers.

Staff members who felt a strong commitment to a medical model were given the opportunity to practice it to its legitimate fullest--in the hospital. Other staff members who opted to practice the broader social habilitation model had their choice of the four Centers.

Step Two: Decentralization

The second major organizational change was the further subdivision of the total Institution, that is, of everything that remained after the M-S-I complex was separated out. The Institution (minus M-S-I) was decentralized into four on-campus "Comprehensive Mental Health Centers." This special semantics (CMHC) was employed with a designing eye on Federal Staffing Grant prospects which later paid off (half-a-million dollars). The actual decentralization move, involving the entire resident population (close to 2,000 at that time), was carried out with full staff and resident participation and was successfully completed in half a day on April 16, 1966.

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[2]Interestingly enough, the upgrading of medical standards in this complex enabled the organization to obtain full accreditation by the American Hospital Association for the first time in its 121 year history of medical direction.

Each of the four Centers was completely free to develop any and all kinds of programs (including high risk programs) as long as it also provides a reasonable facsimile of the ten types of programs (five basic, five desirable) required to qualify for Federal designation as a "Comprehensive Community Mental Health Center."

Federal requirements stipulate the following ten services or programs (the first five comprise minimum requirements to qualify, with the expectancy that the second five are soon to follow--rationale for sequence remains obscure): (1) Residential, in-client ("in-patient") service; (2) Out-client ("out-patient") or campus-visitation service, we included "walk-in" service or IPS i.e. Instant Psychological (or Psychiatric) Service which was provided 24 hours a day, seven days a week; (3) "Partial hospitalization" services, including "day program" and "night program," "week-end" or "week-day" programs, etc.; (4) Emergency service around-the-clock; (5) Community consultation and education services available to community agencies and professional personnel; (6) "Diagnostic services"; (7) Rehabilitation services, including vocational and educational programs; (8) Precare and Aftercare services; (9) Training and staff development; and (10) Research and program evaluation.

As a CMHC each semi-autonomous Center served (but in collaboration with other available community resources) its own exclusive geographic catchment area comprised of three to six counties. The advantages for and rationale for this ecological strategy for programming have been elsewhere adduced (Tooley, 1970).

The position of Director or Program Coordinator of each Center was open to any person qualified by aptitude, experience and ability (including physicians, psychologists, nurses, business administrators or what have you). At one point the chief of the largest Center (300 residents) was by civil service classification a "Welfare Executive." Previously the Head Nurse for thirty-five years, he was promoted and supervised members of all disciplines including M.D.s (an unprecedented reversal of medical pecking order). In many instances old time custodially-oriented institutionalized staff became the most progressive leaders. Often and against all predictions the worst became the best--the most fully actualized. We called this conversion phenomenon the "Beckett bit" where against all odds the role makes the man, or better put, the man rises to the role unexpectedly and completely. This dramatically demonstrates the relationship between participative organization and the constructs of competence and power-of-agency.

Decentralization represented a renegotiated organizational contract that better provided for participative organization as between the Centers and the communities with whom they were to jointly develop collaborative programs. The Centers did not simply deliver services in the traditional sense (though traditionally mental hospitals seldom delivered what they were supposed to) but to be of assistance as needed and requested by communities in local program development.

At that time Illinois Governor Ogilvie advocated an active 3-way "partnership" between Federal, State and Local agencies, also a partnership between Department of Mental Health Facilities and all other community resources, public and private. Ogilvie emphasized that only through such working partnerships can mental health programs be actualized throughout the State of Illinois (Ogilvie, 1969). The former Department of Mental Health, Dr. Visotsky, defined this system-for-exchange (e.g. of services) between facilities and communities as an "implied contract" (Visotsky, 1964). As the Centers developed working partnerships with local community agencies throughout their counties these informal contracts were converted into actual formal written contracts which spelled out the proposed, agreed-upon, exchange of services in terms of sets of reciprocal obligations, rights and benefits. These partnerships developed

into "contract-system reciprocity-networks" (Blackman & Goldstein, 1967; Pratt & Tooley, 1970a).

The pragmatic purpose of setting up the four CMHCs was to create series of partnerships which provided for an open-ended, planned and emergent, participative administration. It also makes it feasible to develop networks of potentially actualizing community contracts.

Step Three: "Participative Administration"

In competition with all of the other Department of Mental Health facilities in Illinois--some twenty-five including the mis-labeled "mental hospitals," the new multi-million-dollar Zone Center facilities (Reidy, 1964) and not-so-new institutions for the mentally retarded--three Gerty Awards were awarded (1968-1969) to Jacksonville State Hospital. These three state-wide first place achievement awards were: (1) For "The most outstanding treatment program": a large-scale Federally-funded, on and off-campus Contractual Workshops System; (2) For "The most unique community collaboration program": the Communities-with-Centers experiment submitted with the believe-it-or-not title, "Horse Therapists on the Right Track" (horses do make fine therapists for humans and we built our own stables and on-campus race track, the Circle TRT; and (3) the award for

"the best state program in the category of administration based not only on criteria for conceptualization but also on being highly workable: Participative Administration" (Coogan, 1969; Pratt & Tschetter, 1969).

In April of 1967, Jacksonville State Hospital formally initiated a new concept and method of administration known as "participative administration." Participative administration simply means that everyone in the organization or who is affected by it, should have a voice in running it. This was our means to alleviate the age-old communication problem between administration, staff, clients and the community.

This approach was in the democratic spirit of the Founding Fathers of America. It was similar to the early New England Township type of government in which every person in each community had a voice in the affairs that concerned him and his community. Each person contributed according to his special abilities and was both responsible and accountable for doing his part. While this approach had its roots in the democratic tradition, it also represented the most current thinking at that time in the fields of political science, business, industry, community development, mental health, and education (Argyris, 1964; Bennis, 1966a; MacIver, 1969a; Marrow, Bowers & Seashore, 1967; Maslow, 1965b; McGregor, 1960; Myers, 1968). As shown by the organizational chart there are three areas or levels of administration. The base or lower area of the chart represented

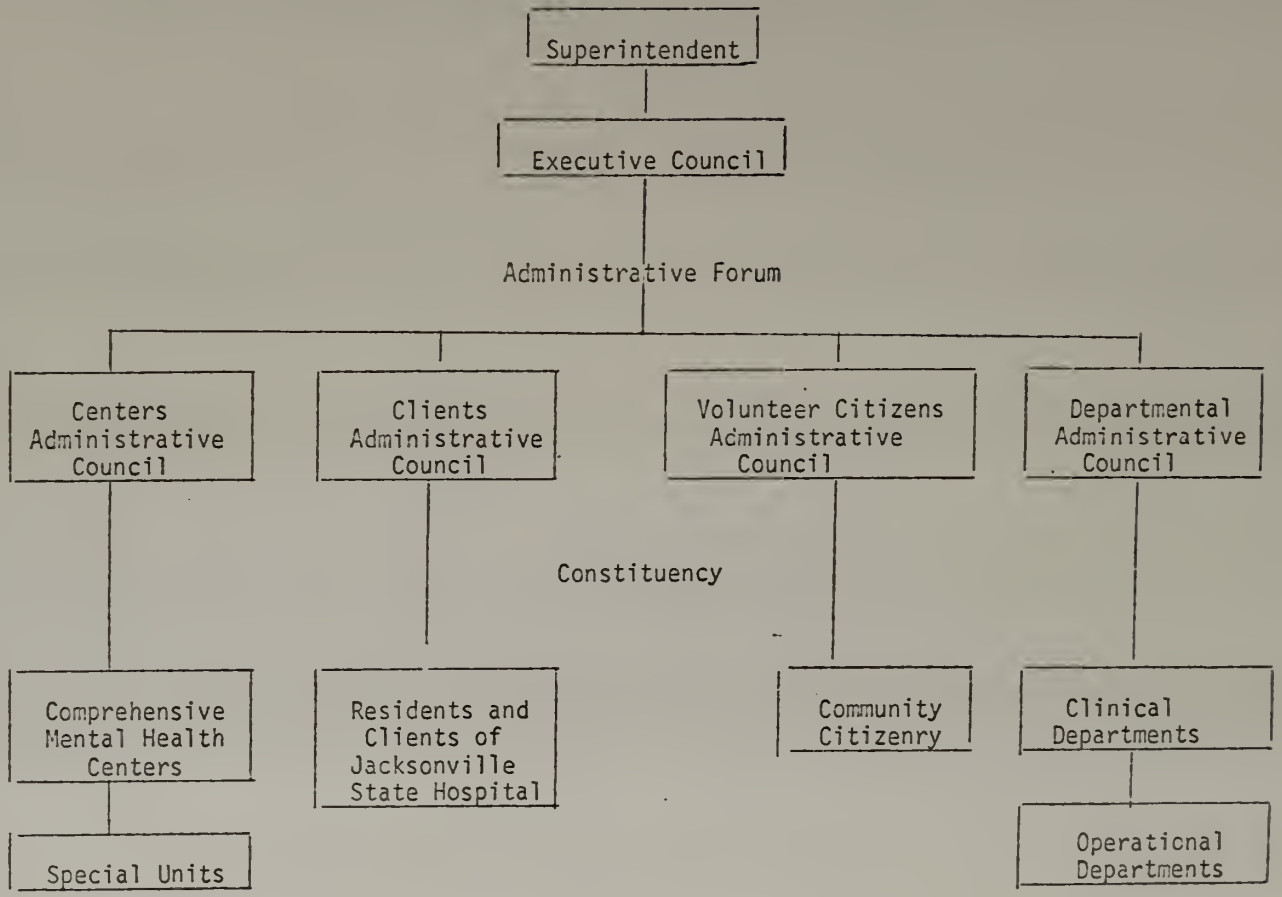
Superintendent
Executive Council
Administrative Forum
Centers Administrative Council
Clients Administrative Council
Volunteer Citizens Administrative Council
Departmental Administrative Council
Constituency
Comprehensive Mental Health Centers
Residents and Clients of Jacksonville State Hospital
Community Citizenry
Clinical Departments
Special Units
Operaticnal Departments

FIGURE II

the foundation of the organization. It was made up of all the constituents or participants in the program.

The second level in the organization chart was the Administrative forum or Administrative Council level. This consisted of the four major Councils which, in effect, represented the administrative power blocks of the community-integrated organization. The four Councils were: (1) Centers Administrative Council; (2) Clients Administrative Council; (3) Volunteer-Citizens Administrative Council; and (4) Departmental Administrative Council (which was an integrated joint "clinical" and "business" services Council).

Centers Administrative Council

Jacksonville State Hospital had four on-campus major treatment Centers plus special Units, including the Medical-Surgical-Infirmary complex (which was comparable to an accredited community medical-surgical hospital) and an Out-of-Zone Unit housing residents from outside our geographic catchment area. Each Center had a distinctive identity of its own and had primary responsibility, authority and accountability for the development of its own programs. Each Center had direct representation on the Centers Administrative Council. Here, plans for the Center programs, on-campus and off-campus, were developed, shared, coordinated and evaluated.

Clients Administrative Council

Resident-clients, and clients-in-the-community, and patients (those hospitalized in the M-S-I complex for physical illness) were all represented on the Clients Administrative Council. Resident government organized on the ward level culminated in this top level administrative body. All wards on each Center had their own resident government. It was interesting that on some Centers resident-clients and staff in semantic rebellion against the custodial connotation of the label "ward" euphemistically renamed these areas as suites e.g. "Dogwood Suite," "Exodus Suite," etc. The resident councils on each Suite sent representatives to their overall Center Clients Council, and each Center Clients Council in turn sent representatives to the Institution-wide Clients Administrative Council. The Clients Administrative Council had its own suite of offices and conference rooms in the Arts-For-Living building.

This Council participated with the other three Administrative Councils in problem-solving, policy construction and overall program innovation, generalization and evaluation. Each resident and client of the Institution could make his critical and constructive ideas known through this Council. It represented in practice the treatment theory that responsibility and participation educate.

Volunteer-Citizens Administrative Council

The function of this Council was to open the door to the wider community. Years ago the campus was isolated on the outskirts of town but the expanded town in time surrounded the hospital. A low, rose and vine-covered garden fence circled the 240 acre tree-covered campus. In the past this decorative wrought-iron fence marked a clear line of demarcation between the "Asylum for the Insane" and the world at large. The function of this Council was to break down all attitudinal remnants of that imaginary "iron curtain" and allow for fuller "participative organization" involving all citizens: staff, clients, and volunteers from the communities. This allowed the organization's philosophy to reach out into the larger community. Conversely, the community had excellent ideas and human resources to offer in the way of constructive criticism, creative planning and collaborative action. This Council gave the entire community an official voice in hospital affairs and represented the individual citizen, private enterprise, business and industry, labor unions, civic groups, and all colleges and schools.

Departmental Administrative Council

Each and every department, both clinical and business, had a voice or forum through the Departmental Administrative Council.

This Council was designed to rapidly minimize and ultimately eliminate the traditional clinical-operational dichotomy. Setting clinical staff above or against business or operational staff was divisive and counteractualizing. It reflects a disjunctive class structure that precludes full participation of all parties to the organizational contract. It mirrors the traditional "staff-patient" caste system and the sterile use of negative labels e.g. "clinical" versus "non-clinical," "non-professional."

At the Departmental Administrative Council programming recommendations could be initiated, policies clarified, inter-departmental problems could be solved, Center-versus-department conflicts resolved, and enhanced roles for representatives of the various disciplines could be developed. Also new enlarged program-oriented staff-line responsibilities for department heads were developed.

Many staff members had a dual and complementary allegiance as members of specific disciplines or departments and at the same time as Treatment Team members. The goal was for every staff member to develop both "specialist" and "generalist" abilities, to become a new breed of "generalist-specialist"; and that every staff member to have the opportunity to take on both line and staff responsibilities. The Departmental

Administrative Council made a major contribution to the overall development of on-campus and off-campus programs, action-research and community activities.

The Inter-Council Contract

The four Administrative Councils maintained close communication with one another and each made its unique contribution in connection with all major policy, programming and evaluation endeavors. Communication among the four Administrative Councils was expedited as follows:

(1) Minutes were regularly exchanged among Chairmen of each of the four Councils.

(2) Each Council could request reports or "position papers" from the other Councils on any pertinent subject in order to clarify given topics or projects under discussion. Thus Councils functioned like "resource persons" to each other.

(3) Each Council had the right (or obligation) to place relevant items for discussion and action on the agenda of any or all of the other Councils and could expect careful consideration with rapid response including specific recommendations or appropriate action.

Each and all of the four Administrative Councils had direct access to the Institution's Administration through the Executive Council. If problems could be solved at the Council level, they were then sent to the Executive Council for consideration. Operationally, the Administrative Councils made their major policy and programming recommendations directly to the Executive

Council and could expect a prompt reply and appropriate action. This action usually took the form of authorizing the Councils to rapidly carry out their own recommendations. Thus, as they increasingly assumed virtually total responsibility for the Institution's operation, the Executive Council became little more than a polite formality, a rubber stamp used by the four Administrative Councils.

The purpose of this type of "participant organization" was to have everybody participate; to open up clear and meaningful channels of communication between all areas of the Institution--among Centers and Units, "clinical" and "business" departments, resident-clients and community clients, the citizens of the communities and the Administration. Problems were generally solved at the point of occurrence; basic decisions were being made by the very people who had to carry them out.

Step Four: Participant Social Action Research

The fourth major organizational strategy used was the development of an extensive Participant-Social-Action-Research Program--a research model described in the monograph, Action Psychology (Pratt & Tooley, 1967b).

The heart of the participant-social-action-research model is the actualization of human systems through action and research (Fairweather, 1967).

Prerequisite to this approach was a comprehensive computerized information system which would provide all participants in the social system accurate and rapid feedback about the consequences of their actions and decisions. Essentially such a system is based upon (a) the technological capacity to electronically process mountains of data rapidly, (b) the development of the concept of social systems accounting, (c) the implementation of Program-Planning-Budgeting-Systems (PPBS) as leverage for organizational change.

The model that was developed was an integrated set of information systems and management procedures for continuously monitoring and optimizing the performance of a mental health system (including its subsystems) and providing information to help make decisions about the future course of the organization. The information systems were designed to:

1. Measure "what is" (i.e. assessing the state of system programatically).

2. Measure the discrepancy between "what is" and "what could be" (e.g. assessing the gap between program outcomes and program objectives).

3. Continuously monitor, evaluate and feed back information to each subsystem on its performance.

The basic input data required fell within three basic classes:

1. Individual Variables (e.g. clinical and demographic data on individual clients from various levels--biological, intrapsychic, behavioral, interpersonal

etc.; also individual data on numbers and types of staff and client transactions).

2. Social System Variables (e.g. treatment, training and research programs; organizational size, staffing, and budgets, etc.).

3. Ecological Variables (e.g. census tract data, social indicators of given communities, incidence of psychosocial disorders, etc.).

The development of this system required three years and over two million dollars. Each of the Centers and units had a top systems administrator who was responsible and accountable for the development of all the systems and refinement of all the procedures within his unit. Thus, "systems development" was not carried out exclusively by a separate department, but like training, was integrated into ongoing, everyday programming, utilizing centralized resources as needed.

In the largest treatment center a concentrated effort was being made to provide all employees with feedback on their own behavior and attitudes. Information from dozens of questionnaires and rating scales was collected and fed back into the system every month. As a result many long-term institutionalized employees began to make that critical contingency link between what they do and say and the subsequent consequences on the center system as a whole and on the residents within the center. The began to learn that they could have an effect on

"the system" and that they could change it to make it a better system in which to live and work.

The following information systems were developed over the three year period.

Staff-Client Transaction Register (SCTR). This system was a total time reporting procedure for all staff members. A form composed of a detailed taxonomy of frequent program transactions including intra and extra organization activities was completed daily by all staff members. This form was used to gather data on the frequency and duration of all staff activities from treatment transactions to housekeeping operations. In addition this system provided basic information regarding the frequency and type of all services rendered, including indirect and direct services to various types of clients (e.g. out-patients, families, judges, teachers, employers, county welfare officials, etc.). An important feature of this system was an accurate accounting of indirect client services such as consultation with gatekeepers, public appearances, etc. These data were cumulated by ward, center and for the total hospital monthly and annually.

Operations and Program Inventory (OPI). This information system was designed to assess the programmatic state of a complex mental health system and to serve as an instrument to measure

(a) the discrepancy between "what is" and "what ought to be" and (b) programmatic changes over time (i.e. movement toward specified objectives). The inventory consisted of a taxonomy of all organizational programs including treatment, training, research, administrative and business operations. Data reported included numbers and types of staff members and clients participating in all organizational programs, including duration of participation. These data were collected daily by each subsystem within the overall system, cumulated and reported weekly, monthly and annually.

Resident Transaction Register (RTR). The Resident Transaction Register provided information about the quantity and quality of each resident's social transactions. The data collected included the frequency, type and level of transactions in all of the social systems in which each resident participated. This included behavior on the ward, in psychotherapy and activity groups, participation in resident government, and level of performance in special training programs. Specifically included were data concerning the depth and breadth of the resident's participation in off-campus social systems. These data were collected daily, updated weekly and reported weekly and monthly by individual. In addition, the individual data was grouped and reported by ward and center each month.

Program Control and Cost Accounting System (PCCAS). This fiscal data system reported each direct expenditure according to the program code developed in the Program and Operations Inventory. These data were collected daily and updated weekly. Additional data included staff costs by program and indirect program costs which were reported monthly and annually for each program, each Center and for the total organization. This system was essential to the construction of systems performance budgets.

Ecological Information System (EIS). The information provided by this system included census tract data for the geographic catchment area served by the hospital; it also included descriptive statistics of the incidence of differing psychosocial disorders and in high incidence areas specific social indicators. In addition client movement statistics including admission, discharge and readmission figures were collected. A special feature of this system was the tracking of clients through the various mental health systems within the catchment area.

These five information systems then provided the information base for an integrated Program-Planning-Budgeting-Evaluation-System (PPBES), as well as for a rudimentary computer-based clinical information system. By combining information from these basic systems five major reports were generated which provided detailed information for making both clinical and

executive decisions at all levels within the hospital.

In summary this system was a means of better achieving the stated purposes of the organization. It provided the basic information and feedback essential to analyze the implicit cost-benefit consequences of administrative decisions at all system levels as well as outcomes of clinical decisions. Secondly, it required that systems at all levels explicitly state their objectives and assess the degree to which these objectives are achieved. Third, it provided system performance information at all levels from the individual client to the zone level. Fourth, it provided an unusually complete information base for conducting research on the effectiveness of specific treatment programs and techniques. Fifth, by combining ecological data on the incidence of psychosocial disorders with social indicator data from the area in question, it suggested points of leverage and possible methods of community intervention to lower the incidence of disorder. Finally, it presented to the public and the legislature an accounting of who was benefited and who was debited by what programs and what systems and it made public definitive information on the cost-benefit consequences of the policies and programs that were developed.

Outcomes

In this chapter I have sketched out a theoretical model of "human systems actualization" and illustrated its rigorous application to a state "mental hospital." The contract-system approach made it possible for the first time to apply a general systems theory approach to transform an entire organization. Progress was saltatory, but real.

The major achievements in the three years of this large-scale experiment in social change included:

1. Reduced the resident population from 2,000 to 1,100.
2. Decentralized into catchment-area Center structure.
3. Developed the Participation Administration structure.
4. Organized a comprehensive interdisciplinary training ladder for all employees.
5. Initiated a systems actualization and research program.
6. Received three Gerty Awards for outstanding programs.
7. Replaced original custodial programs with over 100 new treatment, training, and research programs.
8. Developed reciprocity networks with major industries, universities and mental health facilities in the community.
9. Moved staff into key positions on the basis of personal competence rather than disciplinary membership.
10. Phased out the T.B. ward.
11. Increased the number of clients in community-based programs from 240 to 1,350.
12. Increased the number of community-based programs from one to over fifty.

	January 1966	January 1970	Population Increase/Decrease
Inpatients	2,146	1,117	- 52%
Outpatients	352	1,562	+ 443%
Community Clients	246	1,358	+ 530%
Total Clients	2,744	4,037	+ 147%

Pre and Post Intervention Data

Figure III

Toward the end of the experiment in 1970, I wrote:

> In addition the endeavor has survived in a social-political system in which nothing fails like certain types of success. "Mental hospitals"--as well as prisons and all of society's closed institutions for "socialization-- are potential powderkegs. This experiment in social innovation exists only so long as the encompassing social system chooses to support it. This social experiment, like most social systems, exists at the sufferance of a higher level system--in this case the state and the nation. Granted the mandate to further this experiment, the goal will be to develop the finest "mental health" facility in the world--a true center for Human Actualization (Tooley, 1970b).

Within two months the prediction, like Bennis' "quick karate chop" came true. A new, ultra-conservative governor dismissed the liberal Director of Mental Health, installed an interim hatchetman and proceeded to dismantle the Department and divert its many resources into law and order programs. Under the circumstances it became impossible to provide anything more than custodial services and those competent professionals who were not purged with Dr. Visotsky mostly left the state (Fisher, Mehr & Truckenbrod, 1973).

In spite of the monumental set backs of 1970 isolated areas of progress are being made around the county, but as mentioned earlier, most liberal human service professionals are riding out the Zeitgeist waiting until the broader society has once

again set priority on human development and actualization (Tooley, in press). Like Bandura, it is still to be hoped that:

> The day may not be far off when psychological disorders will be treated not in hospitals or mental hygiene clinics but in comprehensive learning centers, where clients will be considered not patients suffering from hidden psychic pathologies, but responsible people who participate actively in developing their own potentialities (Bandura, 1967, p. 86).

CHAPTER X

FUTURES

> Prophesy is extremely difficult--especially about the future (ancient Chinese proverb).

Given the difficulty of forecasting what might we anticipate as future areas of application? Generally speaking it would seem that any situation, person or system in need of stabilization, security, predictability, or guaranteed outcomes might look to a a contractual mechanism to meet these needs. Let us look at some examples.

The Living Will and the Right to Die:

As noted in an earlier chapter the modern legal concept of "contract" historically came about in the form of a "will" to better assure people of property that their wishes would be carried out after death (Maine, 1861). It is no historical accident that today's advocates of what is being called the "right to die" are proposing what they call a "living will." If enacted, it would in essence constitute a legal contract stipulating that under certain conditions (such as terminal disease) that life not be supported by mechanical, pharmacological or surgical means. Such a resolution has been in 1974 introduced as a bill in the Massachusetts Legislature.

Alternative Marriage Contracts:

Since first proposed some years ago (Satir, 1967; Tooley, 1966b) alternative, renegotiable marriage contracts have been becoming increasingly popular--to the point that the O'Neills' book, Open Marriage reached the best-seller lists last year. In spite of organized resistance by the churches, bills are being introduced to legalize a variety of different types of contracts with contractual articles covering such contingencies as: division of property; custody of children; sexual and economic rights and obligations; domestic and child-rearing obligations; and length of contract and the processes of negotiation and arbitration (Rogers, 1972).

In a related area some professionals are beginning to experiment with a contractual approach to family therapy and marital counseling. Here the basic process is that of working out the "family contract" in ways that are reciprocally satisfying and mutually reinforcing to the family members.

Alternatives to Tenure:

As universities undergo the changes required by a changing broader society, such institutions as tenure are being critically reappraised in the light of the needs and economics of the society. One alternative being studied at the University of Massachusetts is a "graduated contract plan" culminating

in tenure under certain conditions (George, 1974). Curiously, this plan is not dissimilar to the graduated contract plan proposed for mental patients ten years ago (Praff & Tooley, 1964). Other colleges and universities such as Union College are experimenting with similar contractual arrangements with faculty.

Alternatives to Supervision:

Traditional methods of supervision are clearly no longer sufficient in dealing with human beings in an increasingly democratizing climate (Toffler, 1970). A handful of organizations are experimenting with substituting the supervisory process for a negotiated contract process in which usually a junior and a more senior member sit down and define in operational and/or behavioral terms what is expected of each. Specific goals are set, the time-frame is developed, performance criteria are identified and a process of contract review is agreed upon. Essential to this concept is that when performance is unsatisfactory, the terms of the contract become the primary focus. This is in sharp contrast with the traditional practice of reviewing and criticizing the employee's performance (Tooley, in press)--not unlike Ryan's (1971) concept of blaming the victim.

Contract Alternatives to Schools:

The early attempts of performance contracting have opened the doors to broader application of contract theory in education. The extensive use of learning contracts at the School of Education at the University of Massachusetts and the development of a state-wide contractual college system in New York--Empire State College--indicates a more extensive exploration of educational contracting. One possibility recently adduced by Harvey Schribner (1974) is individualized performance contracting (as opposed to organizational performance contracting). Basically, in a system of this type, competent individuals, both traditional teachers and others, would be identified and certified as to their competence. Negotiations would then be conducted leading toward a contract whereby for a determined amount of money (or other reinforcer) a given "teacher" would agree to bring a determined number of students up to agreed upon levels of proficiency in specified educational or vocational areas.

Contractually Negotiated Ethics:

Historically, Western Civilization has lived with (and by) value systems and standards of ethics based upon Judeo-Christian dogma--set, irreversible doctrines which clearly defined what was morally right and what was sinful. In response the position of "situational ethics" emerged in

recent years in an attempt to put in perspective the situational determinants of moral behavior; this axiological stance, however, can be justly criticized as being as guilty of ex post facto "cultural relativism" as moral dogma has been of rigid "cultural absolutism." A possible alternative is the negotiation between individuals, groups and organizations those behaviors that are prescribed as "moral" and those proscribed as "immoral" or wrong. This, in one instance, is the moral basis of the new alternative marital contracts just described (Nielson, 1974).

Ethics and morality, then, become behaviors to be negotiated and exchanged; values to be made explicit and promises to be made--with contingencies defined--all within the overriding and binding context of a negotiated contract (Johnson, Dokecki & Mowrer, 1972; Osborn, 1974; Tooley, 1974).

Back full circle to our original postulate that organized social life and civilization are dependent upon reliable, predictable behavior and the keeping of promises--or contracts. We return to Hayakawa's statement:

> What we call society is a vast network of mutual agreements. We agree to refrain from murdering our fellow citizens, and they in turn agree to refrain from murdering us; we agree to drive on the right-hand side of the road, and others agree to do the same; we agree to deliver specified goods, and others agree to pay us for them; we agree to observe the rules of an organization, and the organization agrees to let us enjoy its privileges. This complicated network of agreements, into which almost every detail of our lives is woven and upon which most of our

expectations in life are based, consists essentially of statements about future events which we are supposed, with our own efforts, to bring about. Without such agreements, there would be no such thing as society. We would all be huddling in miserable and lonely caves, not daring to trust anyone. With such agreements, and a will on the part of the vast majority of people to live by them, behavior begins to fall into relatively predictable patterns; cooperation becomes possible; peace and freedom are established (Hayakawa, 1967, p. 213).

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